

Promoting entrepreneurship, employment and business competitiveness

THE EXPERIENCE OF BARCELONA



OECD Leed Programme

Local development agency review series

Promoting entrepreneurship, employment and business competitiveness

THE EXPERIENCE OF BARCELONA



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Printing: Addenda

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Foreword

Barcelona has been and still is a leading city in terms of the strategic design of its socio-economic model. It has been capable of transforming itself into a socially cohesive and economically competitive city. And by means of this process it has become a reference throughout the world.

This study provides us with a thorough and professional look at the recent evolution of the model of growth of our city and the contribution of our system of economic promotion. But, above all, it highlights the role played by Barcelona Activa, the Local Development Agency of the City. After more than 20 years working side by side with the citizenship and companies of Barcelona promoting entrepreneurship, business growth, the development of human capital and quality employment, this analysis helps us to know where we are and where we are heading.

It is a great pleasure for us to discover that the way we do things and how we manage the economic development of the city through Barcelona Activa is recognised by the OECD as a key part of the success of the economic promotion of the city. It is very important backing for all those of us who believe that, by means of the support for entrepreneurs, the network of innovative small and medium-sized enterprises and the improvement of our professionals, we can construct a better city to live in, to become entrepreneurs and to work. The commitment achieved through the agreements with the institutions in defining and working together towards a more solid and robust economic model, based on innovation, entrepreneurial capacity and social cohesion, with a strong municipal leadership, it is also a premise for work that has characterised the municipal action and one that has been a key factor in situating Barcelona in a strong starting position faced with the economic crisis which has hit the global economy.

Furthermore, we share the points of improvement proposed in the study and we are committed to continuing the work on improving the weaknesses detected, and to turning the threats into development opportunities for the citizens and companies of the city.

This document is, without doubt, very valuable for anyone wishing to approach local development policies and the model of growth of Barcelona, as well as those of us who are working on making possible a city in which personal, professional and business projects shape and strengthen the Barcelona we want.

I would like to give thanks to the LEED programme of the OECD and its team for the way they have produced this very thorough report, because I am sure that it will help us to reflect and guide us in the future. However, I would not like to end without also thanking the team of Barcelona Activa for the excellent work they have done over the past 22 years, which has helped to make Barcelona a better city.

A handwritten signature in black ink, consisting of a large, sweeping loop followed by several smaller, more intricate strokes.

Jordi Hereu
Mayor of Barcelona

Barcelona Activa has been an important Partner to the OECD LEED Programme since its creation in 1986. The Review of the Agency came at an important juncture in the world economy. An Agency, like many of its kind, created to respond to an earlier economic and social crisis has much to teach us in these challenging times. The innovative and highly effective approach to economic development has been a constant source of learning and inspiration for cities and regions throughout the LEED Programme.

Our common histories – being created to respond to the economic downturn of the 1980s, the massive economic restricting that was taking place throughout the developed world and resulting rise in unemployment demanded new approaches and new interventions at all levels. The LEED Programme, with its emphasis on local development has played a unique role within the OECD, serving as an interface between cities, regions and national governments. Our knowledge and learning are founded on clear principles of co-operative action.

Analysing and working with Development Agencies has been a longstanding aspect of our work. This study has enabled us to explore in detail how an Agency can stimulate a substantive policy shift which led to the restructuring of the economy of Barcelona. The Agency has benefitted from strong and decisive political and professional leadership since its creation in 1986. These factors have ensured that Barcelona Activa is a ‘fit for purpose’ economic development agency and leader amongst its international peers. The Agency’s ability to react to and anticipate change has placed it well to contribute to the economic transformation of Barcelona. Its skills will be tested to the limit in the period ahead but as an Agency that has risen to immense challenges in the past Barcelona is now better placed to respond to the current economic crisis.

Our thanks go to Maravillas Rojo for supporting our work so enthusiastically since the 1980s; to Mateu Hernandez for being a dedicated expert and advisor to our Programme and to Deputy Mayor Jordi William Carnes for his ongoing support throughout this Review.

This project was led by Debra Mountford, Senior Policy Analyst and Manager of the LEED Forum for Development Agencies and Investment Strategies and benefitted from the unique expertise of Greg Clark, Chair of the LEED Forum for Development Agencies and Investment Strategies; Andrew Borraine Chief Executive of the Cape Town Partnership; Andrea Lee, UK Delegate to the LEED Directing Committee from the Department of Communities and

Local Government; Gabriela Miranda-Gallardo, OECD Policy Analyst and Professor Pete Tyler of the University of Cambridge. Joe Huxley carried out additional research and edited this report.

A handwritten signature in black ink, consisting of a series of loops and a vertical stroke, identifying Sergio Arzeni.

Sergio Arzeni
Director, Centre for Entrepreneurship,
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Chapter 1

The review

1.1. Conceptual framework for city and regional development agency reviews

Over recent decades there has been dynamic growth of the sub-national efforts to promote economic well-being in most of the developed world. Not all of the developments tend in exactly the same directions, but there are now few absolutely fundamental differences of philosophy. As an overall framework, it is clear that city economic development now takes, as a starting point, dynamic macro-economic change. Indeed the beginnings of active economic development promotion in many developed countries can be traced back to much wider processes of deindustrialisation, massive technological change, or continental economic integration.

Economic development agencies now play a fundamental role in the delivery of economic development. However, there is no common understanding, or rigid formula, of what a development agency is. No global census of development agencies has been undertaken but there are probably more than 15,000 development agencies now worldwide, with more being created every month. They vary in size, scale, and function and there have been different starting points. Several waves of development agencies might be identified:

- In Europe after World War II to aid post war re-construction.
- In North America in the 1960s and 1970s to address the impact of deindustrialisation in the ‘rust belt’.
- In East Asia in the 1980s and 1990s to help plan and manage rapid urbanisation and industrialisation.
- In the current era in Latin America, South Asia, Africa and East Europe to promote economic development in the newly integrating economies.
- There has also been a continued process of re-inventing development agencies in places where they already existed, changing their focus of

intervention and tools applied, or disbanding the old generation of development agencies and creating new ones. The shift to city and regional growth policies in many countries of the OECD, rather than the pursuit of ‘old style’ regional policies seeking to address only the challenges of lagging regions, has given rise to a new expansion in the number of development agencies.

It is important to note that whilst development agencies are the products of national policies in some countries, this is not universally the case. In some countries, Italy for example, development agencies are the products of local bottom-up efforts which are not subject to national co-ordination or planned programmes of national resourcing. In the United States of America and Canada, most city and regional agencies are fostered by city and state/provincial governments acting with private sector partners, not by federal governments. In Mexico, federal government has played a key role in establishing development agencies. Equally, whilst development agencies at the city-regional level are less common in countries that have rigid regional political geography, they are quite common in countries where there is no political regionalism (this may seem ironic, but the absence of competing entities in alternative conception of ‘region’ is quite important).

Not all development corporations/agencies play the same roles or do the same things. We can identify four different elements of development agency activity:

- **Economic roles:** where development corporations/agencies seek to build markets within their territories by acting within them. These roles including the development agency acting in a risk and cost sharing manner using entrepreneurial approaches. Such roles involve intermediating with investment, assets, infrastructure, land, property, finance, planning, and marketing/promotion. The development agency derives its unique role by taking on tasks that are normally outside of Government due to the nature of commercial disciplines and focus required, the risks that have to be managed, and the creativity involved. This often allows fiscally disempowered local governments to sponsor an agency which can operate outside of tight controls and leverage more than the local government is allowed to. Business is frequently the partner and/or client of this activity, and although it is accountable to Governments, the agency has to mirror the ‘business-like’ behaviour, processes, and time-scales of commercial players if it is to be successful. This is a case of overcoming policy and investment failures.
- **Leadership roles:** where the development corporations/agencies play a key role on fostering a long term plan and vision for the territory, galvanising the instincts of multiple leaders, setting out a new future around

which resource mobilisation can coalesce. The development agency is often here an ‘independent’ forum in which distinctive interests can be brought together, and aligned, to shape a long term purpose beyond the specific limitations of electoral cycles and partisan policies. This is a case of addressing leadership failures.

- **Governance and co-ordination roles:** where the development corporation/agency helps to facilitate practical co-ordination towards the pursuit of the development strategy, helping to overcome the limitations of fragmented multiple jurisdictions and responsibilities in the public sector, and providing a means for practical engagement with the private and civic sectors. In this role the development agency is the chief practical mechanism for co-ordinated multi-lateral action. This is case of addressing co-ordination failures.
- **Implementation roles:** where the development corporation/agency can assemble dedicated and capable teams to focus solely on pursuing the development strategy. This will involve complex project management and finance skills, business/investor facing services, and the ability to design and use new tools quickly. The distinctive dimension of this role is often in how development agencies can attract and develop expert and specialist staff that are suited to pursuing public goals in a commercially sensitive manner, and are capable of implementing co-operation between public and private sectors in ways which work for both cultures. This is not an insignificant capability, and it frequently distinguishes development agency staff from public officials more generally. This is case of addressing capacity constraints in the public sector.

As ‘quasi governance vehicles’, development corporations/agencies can offer a unique means to assemble both the resources (or assets) and the authorities (or permissions) required to undertake certain territorial development activities. In these roles development agencies can become the means to overcome complex administrative geographies which may not align with the natural economic geographies that are the focus of sound territorial development. Neighbouring local and regional governments can work together through the development agencies, or simply sponsor projects that they undertake. Equally, the development agencies may play a role in pooling resources between different ‘tiers’ of government (local, regional, state/provincial, national, federal) and between ‘spheres’ of government (departments, agencies, authorities, commissions, educational institutions, and others). Lastly, they can play an important role in bringing together public, private, and civic sectors, either through joint ventures, partnerships, service agreements, compacts, or other vehicles.

Development activity focussed towards city competitiveness requires the use of economic development tools which can ultimately influence market behav-

iours through both exogenous and endogenous players. Such tools often require careful calibration and management if they are to achieve net positive outcomes without distorting basic market functioning. Development corporations/agencies are seen as capable of designing and implementing such interventions using unique skills and insights from public policy and from market economics/commercial disciplines.

But perhaps most importantly, development corporations/agencies appear to offer a politically acceptable form of co-investment between otherwise disparate partners. This might be for several reasons:

- As sole purpose vehicles there is little chance of resources being used for the wrong purposes, and development corporations/agencies can be held to account.
- As corporate entities development corporations/agencies can be branded to reflect joint ownership (and joint credit).
- As time limited vehicles, development corporations/agencies can be closed down if necessary (unlike tiers of Government which it is hard to close down).

Development Corporations need distinctive rationales

There have been many different starting points for development corporations/agencies, at different points, and in different countries. But understanding the particular purpose, or mixture of purposes, that an agency was established for is both key to assessing how well it is doing, and essential for estimating how it might contribute to city competitiveness and metropolitan development. A development corporation/agency is usually set up because one, or more, of the following reasons is suggested. A development agency will be:

- i) Able to quickly address a crisis in the city economy and to organise different actors to take urgent actions together. It is able to respond to a crisis or challenge for which there is no other logical agent (*e.g.* the closure of a key site or facilities), and is not distracted by other mandates. This is the ‘crisis response’ mandate.
- ii) Able to act as an organising vehicle for territorial development activities when they are new or under developed, giving visibility to the work programme, and distinguishing it, organisationally, from other activities. This is the ‘initiating territorial development’ mandate.
- iii) Potentially more ‘investor facing’ and ‘business like’ in its style than a municipal office or department of regional/national government, including the ability to negotiate directly with developers and investors, deliver

services to businesses, manage commercial funds, and interface with other commercial actors. In some cases this might include having some delegated local/regional government functions (*e.g.* Land Use Planning, or financial assistance, decisions) delegated to it. This is the ‘business interface’ mandate.

- iv) Able to focus on the specific needs of an identified redevelopment area or a major project, which may not cover a whole municipality, or may cover multiple several jurisdictions. It may be able to organise a programme for a geographical area, or a new initiative, for which no other ‘ready’ governance structure exists. This is the ‘special zone/ un-served territory’ mandate.
- v) A new and ‘independent’ (and more flexible) vehicle for strategy making, partnership co-investment, and may be capable of integrating the inputs of diverse range of public and private partners. This is the ‘aggregator’ mandate.
- vi) Able to fulfil an ‘outward facing’ or promotion role for the city or region, promoting its appeal and attractiveness for external investment in a targeted manner to key audiences, distinct from the public debate on how the territory needs to be improved. This is the ‘marketing and promotion’ mandate.
- vii) Able to develop more flexible procedures and human resource arrangements, enabling it to do things more quickly or efficiently than other organisations. This is the ‘flexibility’ mandate.
- viii) Able to undertake a focused task over a defined time-period unencumbered by other missions and goals. This is the ‘sole focus’ mandate.
- ix) Able to achieve a legal or fiscal status which will allow it to utilise or develop additional tools, incentives, investment, asset management and interventions that are otherwise absent, or not available to local governments. This is the ‘leverage’ mandate.
- x) Able to manage a transparent process for delivering financial assistance and incentives to businesses, or critical resource allocation decisions, in ways which are not directly politically controlled, and may be therefore seen as more impartial, or not the responsibility of local politicians. This is the ‘transparency’ mandate.
- xi) Able to share risks and costs effectively across a range of interested parties, by negotiating and allocating a clear and novel agreement about how they will be apportioned. This is the ‘risk and cost sharing’ mandate.

Few development corporations/agencies will be operating all of these ‘mandates’ simultaneously, but many will have more than one to pursue. This dis-

cussion of ‘mandates’ may appear a little arcane, but it is useful in helping to crystallise how development corporations/agencies may differ from the local, regional, and national governments who sponsor them. They stress the unique things that are needed from a development agency, how its impact should be assessed, and whether its mandates should be revised and change over time.

It is within this context that the OECD LEED Programme reviews development agencies. The work seeks to articulate international best practice and the promotion of strategic and effective economic development tools. Simultaneously, the work contributes to shaping future development agendas in cities and regions and assisting development agencies in the creation of new tools and defining new priorities.

Barcelona Activa is an exceptional agency by international standards and this review takes place at an important juncture in economic development. Barcelona Activa is dynamic and effective in contributing to reshaping the city and regional economy in which it is located. But it is an agency that recognises the need to evolve and to continue to respond to global economic challenges. Barcelona Activa was established in the midst of an economic crisis which saw unemployment rise to over 21% in 1986. Today, Barcelona is in a more robust position to weather the current financial crisis but it will not be immune to it. Continuing to innovate and lead the economic development agenda will be more important than ever.

Chapter 2

Barcelona: rapid transformation of a local economy

2.1. The Barcelona story: an introduction

The City of Barcelona provides an example of a rapid transformation from a classical industrial city in decline to one that has a dynamic economy with a world class reputation. The Barcelona model of local development has been so successful that it is internationally renowned and, even in the face of the current economic crisis, positions the city on a robust and positive footing for the future. To appreciate the socio-economic and political dimensions of the Barcelona of today, which are profiled later in this chapter, it is first important to understand the remarkable and rapid transformation of the city over the past 30 years.

Cities and regions are in a constant state of dynamism, which can be conceptualised as phases or waves of development. In the literature, these development phases, which are broadly linked to business cycles, are described as: ‘growth’; ‘plateau’; ‘contraction’ and ‘renewal.’ For Barcelona, since the 1970s, two phases can be identified. The impacts of these two phases have been deep and diffuse and have seen the city evolve from a declining industrial city to an economically diverse, vibrant and attractive location. Whereas the Barcelona of the 1970s was not; thanks to a sustained and strategic leadership effort, the Barcelona of today is firmly on the map.

Phase 1 (1970s-1992): addressing the fundamentals

Barcelona’s industrial legacy concentrated on the textile, food processing, chemicals and machinery sectors. Competitive pressure in the late 1970s and 1980s led to acute deindustrialisation in the city and a significant contraction of the local economy. By 1986, the unemployment rate in the city reached of 21.4% and many parts of the city became derelict. As a result, Barcelona suffered from low international visibility and a lack of civic pride.

The goal in this phase was to arrest decline and begin to restore confidence. This required visible signs of change and physical redevelopment of the city.

As a result the City Council initiated a redevelopment strategy to achieve physical and infrastructure regeneration.

The end of the Franco regime in 1975 and the first direct election of a Barcelona Mayor in 1979 raised the expectations of the city for a brighter, more positive future. However, it was the awarding of the 1992 Olympic Games by the IOC in 1986 that provided the pivotal point in the transformation process for the city. The impact of the Games is detailed elsewhere and the key points to emerge are that Olympics succeeded in galvanising the effort to consolidate, reorganise and improve the city's infrastructure. This included substantial work on the telecommunications system, the expansion of the road and rail networks and the sewerage system. Other major projects focused on the renovation of thoroughfares and town squares and boosting the city's cultural heritage. Other improvements were the conversion of old industrial areas and the regeneration of the waterfront including reclamation of the beach.

This six year period of intensive activity not only had a substantial effect on the future of Barcelona, its international status and its economy but it succeeded in changing the image of Barcelona from one of deprivation and deindustrialisation to one of prosperity, confidence and cultural vitality which was crucial to attracting investors and tourists. In addition to the tangible economic impact, the Games led to important changes in the way Barcelona's authorities did business. The focus on major urban infrastructure and large scale regeneration sites initiated a period of land and property management. In the lead up to the Games, a consensus based approach began to emerge, which left the post-Games legacy of a collaborative ethos.

Phase 2 (1992 – 2007): Barcelona's shift

The Olympics provided a springboard for the development of a strong brand for Barcelona based on an entrepreneurial spirit and a high quality of life.

The vision for the city during this period was to become world-class with a focus on attracting, growing and retaining talent and creative businesses in the services/knowledge-based sector. The development model during this phase was built heavily on knowledge, entrepreneurship and value-added services. An intensive effort to reengineer the city's physical space also took place. La Diagonal was linked to the seafront, the waterfront was regenerated and Forum 2004 with its conference and hotel facilities was constructed. Notably, the 22@ project, which saw the upgrading and demarcation of the south east quadrant of the city for the incubation of SMEs, was also planned and implemented. Ambitious projects such as the new high speed station in the north of the city, a new airport and the expansion of the city's port were also made.

Barcelona as a vibrant, entrepreneurial city represented the cornerstone of the vision during this period. It is on the back of the sustained and strategic leadership effort, which was united behind this ambition, that the city has built for itself a powerful international city brand, a strong SME network and an entrepreneurial spirit; a diversified economy, a healthy balance sheet and a high quality of life. Indeed, the city ranks highly on a number of city performance indicators. In 2006, for instance, and for the eighth consecutive year, European executives chose Barcelona as the European city with the highest quality of life for its employees. The Barcelona Activa business incubator is also home to a high proportion of overseas firms (approximately 25%).

This recent success means that Barcelona is particularly well-positioned to respond to the current global financial crisis relative to other cities across the world. Indeed, the city's investment near future plans are scheduled to proceed as planned and will not significantly strain the city's budget.

2.2. Barcelona and its development system: a brief profile

This section sets out some of the key socio-economic characteristics of contemporary Barcelona. Though not exhaustive, it also identifies important components of the city's economic development system and considers a number of the main players involved in the collaborative development effort, which has strengthened over time. The role of Barcelona Activa is also briefly mentioned before it is considered in greater detail in chapter three. The section then goes on to describe some broad strengths which have driven the system of economic promotion in Barcelona, and some potential challenges. The section highlights that this is not the end of the success story. Barcelona is on the cusp of the next wave of development and recognises major challenges and opportunities ahead, not only economic but also social. This provides the context for the future role of Barcelona Activa.

The City of Barcelona

Barcelona is the capital city of the region of Catalonia, located in the north east of Spain on the shore of the Mediterranean Sea. The city provides an example of rapid transformation from a classical industrial city in decline to one that has a reputation on international markets. Today the City of Barcelona has almost 1.6 million inhabitants in an area of 100 square kilometres, but the metropolitan region extends to almost 200 municipalities and hosts 4.7 million inhabitants. Barcelona is the second largest city in Spain, just after Madrid, the capital city and makes Barcelona one of the major metropolitan regions in Europe. The table below provides key overall figures on the City of Barcelona's economy.

Figure 2.1. Barcelona's situation



Source: <http://www.teflcourse.net/newmaps/barcelona.jpg>

Table 2.1. The City of Barcelona: key figures

Area	
Total	100 km ²
% of Spain	0.02%
Population (2007)	
Total	1,595,110
% of Spain	3.6%
Active population*	77.2%
Density (inhab./km ²)	15 897
Foreign population	15.6%
GDP	
Total GDP 2005 (EUR millions)	55,178
Barcelona GDP/Catalonia GDP	30.5%
Barcelona GDP/Metropolitan Region of BCN GDP	71.2%
Unemployment* (2007)	
Employment rate	72.1%
Female employment rate	65.5%
Exports	
Growth (2006-2007)	+8.4%
Total exports of Spain	22.2%

Notes: *Specific rate: population > 15 years and < 65 years. 2007 average.

Source: Own calculations on data of Idescat and the Statistics Department and the Economic Activities Research Programme of the Barcelona City Council

A strong local economy

Since the beginning of the 1990s, the City of Barcelona has developed a strong economy, being today the most important contributor to the economic structure of the region of Catalonia. As shown in the table below, in 2001 the economic activity in the City of Barcelona accounted for approximately one third of the GDP of the region of Catalonia, almost half of the GDP of the Province of Barcelona and practically the totality of the GDP of the Barcelona County.

Moreover since 2005, Barcelona has achieved the goals fixed by the Lisbon Summit for the year 2010. The city's employment rate stood well above 75% with the female employment rate above 65% in 2007. The Lisbon goals are

70% and 60%, respectively. The city's unemployment rate dropped gradually in the 1980s and more steadily over the last decade, from 21.4% to 6.6%.

Table 2.2. Barcelona contribution to the GDP (2001)

NUTS-V	NUTS-IV	NUTS-III	NUTS-II
City of Barcelona	Barcelonès (County)	Province of Barcelona	Catalonia Region
32.15%	32.91%	75.02%	100.00%
42.86%	43.87%	100.00%	
97.69%	100.00%		

Source: <http://www.pcb.ub.es/aqr>

In 2006, the Spanish GDP exceeded the EUR 873,000 million, being the region of Catalonia the main contributor (18.7%) of all of Spain. Together with Madrid (17.5%) and Andalusia (13.9%), Catalonia contributed to more than half of the national GDP. Barcelona's contribution to the Spanish GDP in 2005 stood at 6%.

Barcelona is also an export centre. The international competitiveness of Barcelona's companies, measured in terms of exports of high technology content, surpasses the Catalan and Spanish averages (Annex Table 2.3).

Table 2.3. Industrial exports according to technology content (EUR millions) (2006)

	Province of Barcelona	Catalonia	Spain	Proportion Cat./Spa.	Proportion Bar./Cat.
Total exports	37,538	45,506	156,216	29.1%	82.5%
Exports of high technology content (HTC)	6,819	7,070	16,646	42.5%	96.5%
% HTC / Total exports	18.2%	15.5%	10.7%	–	–

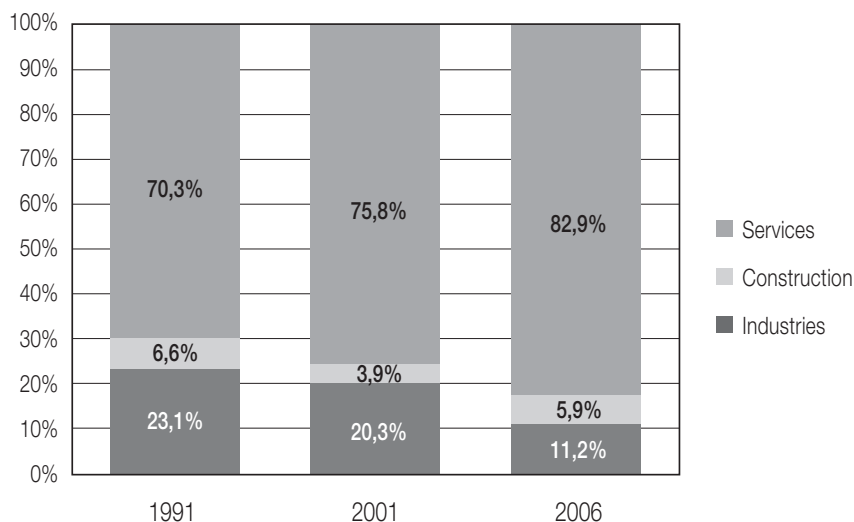
Source: Idescat

An evolving productive sector

As it has been mentioned before, the City of Barcelona has a longstanding manufacturing and industrial tradition that has been adapting to the challenges posed by the knowledge-based economy. While Barcelona was traditionally known for automotive, chemical, textile, food processing, publishing and con-

sumer electronics industries, these activities have almost entirely moved to the city suburbs. The evolution of the economic activities of the City of Barcelona focused around the tertiary sector (Annex Figure 2.2).

Figure 2.2. **Evolution of the economic activities in the City of Barcelona**



Source: Barcelona City Council; Idescat

As with the overall Spanish productive structure, the City of Barcelona has transformed into a service-oriented economy; whereby the vast majority of the employment and economic activity is concentrated in this sector. In the City of Barcelona, the service sector has an even bigger weight in the economy not only due to the important number of enterprises in the tourism and other business-oriented sectors, but also because the industrial activity has gradually moved to the outskirts of the city due mainly to the rise in land prices in the inner city.

Despite the reindustrialisation process, the industrial activity in the region of Catalonia remains above the national average, while in the City of Barcelona it lies below the national average (Annex Table 2.4). This trend is reversed when looking at the services sector, whereby in Barcelona it is highly above the national average while in Catalonia it lags slightly behind. This trend reflects the concentration of the service sector in the inner city.

Table 2.4. Production structure (% of employees by economic sector, 2006)

Sector	Barcelona	Area Catalonia	Spain
Agriculture	0.2%	0.5%	0.5%
Industry	11.0%	20.0%	16.4%
Construction	5.9%	10.1%	12.9%
Services	82.9%	69.4%	70.2%
TOTAL	100%	100%	100%

Source: Barcelona City Council; Idescat

Activities related to tourism, especially business tourism, and conference activities have grown in the city particularly with respect to new economic opportunities and employment. Today, Barcelona is one of the most important cities for the hosting and organisation of international congresses and conventions (placed seventh in the world rankings for the number of congresses in 2006). Business tourists represent 51% of all of the city's tourists. Moreover, connectivity and logistical sectors are increasing in importance thanks to development of the Port. Container traffic has increased by 100% in seven years. The Airport handled 30,000,000 passengers in 2007.

A business-friendly environment

In 2007, the province of Barcelona was the host to more than 470,000 enterprises. This represents 14% of the total number of companies in Spain and 76.3% of Catalonia's total. The business sector in the City of Barcelona is formed in its majority by small and medium-sized enterprises (SMEs, between 0 and 199 workers). Small-sized enterprises (less than ten workers) account for 94% of the total business sector. Only 0.2% of the companies in the city employ over 200 workers, which reflects the strong SME tissue and the need to further support the enterprise growth. The business-friendly environment of Barcelona is illustrated by the dynamic rate of net business creation. In 2006, the province of Barcelona registered a net growth of 25,022 companies. This figure represented 73.5% of the net business creation of Catalonia and 15.4% of Spanish net business creation in 2006.

Over the past few years, the sectors in which the economic activity takes place have moved towards higher added-value sectors.

Table 2.5. **Number of employees in high technology and knowledge services (1) (1Q07)**

	City of Barcelona	Province of Barcelona	Catalonia	Proportion Province Bar./Cat.
High technology services (2)	48,121	69,646	79,060	88.1%
Knowledge services	182,147	306,696	372,357	82.4%
Total employees	1,076,958	2,508,762	3,301,630	76.0%
Proportion of employees high tech and knowledge / total employees	21.4%	15.0%	13.7%	–

Notes: (1) Employees and self-employees registered in the Social Security System; (2) It includes post services, telecommunications, IT activities and R&D.

Source: Source: Statistics Department of the City Council of Barcelona

Moreover, it should be noted that Barcelona has created a particularly entrepreneurial environment, reflected in the important number of people that enrol yearly in a new business activity.

As the Global Entrepreneurship Monitor 2006 shows, the rate of entrepreneurial activities in the province of Barcelona measures 8.9%, a figure which is similar across the whole of Catalonia (8.9%), but which is higher than the national average (7.3%). This figure is also higher than many nations across Europe, behind only Iceland and Norway. Barcelona is also placed fifth in a list of the best European cities for business, according to the European Cities Monitor 2008 and is the centre of an important Foreign Direct Investment attracting economic zone. For instance, Catalonia attracts 26% of the total Foreign Investment across Spain (2Q07).

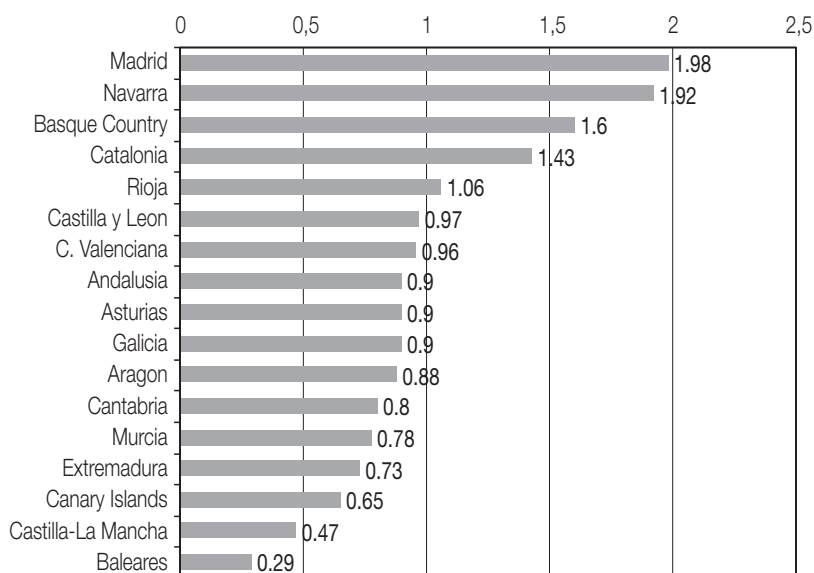
Evolution of R&D expenditure over GDP

With respect to R&D expenditure over GDP, the targets across Europe at national, regional and local level have to be met in a new scenario. The clearest benchmark involves the commitments in the Renewed Lisbon Strategy, which establishes a ratio of expenditure on R&D of two-thirds from the private sector and one-third from the public sector as a target for 2010, and an increase in total R&D investments to 3% of GDP. All of which is designed to meet the challenge of becoming the world's most competitive, dynamic knowledge economy.

At national level, INGENIO 2010 is the Spanish benchmark. Approved in 2005, this plan includes ten R&D&I commitments in a bid to converge with other European countries by 2010. It includes a commitment by the Spanish Government to increase the R&D&I budget by 25% each year.

Compared with the other Spanish regions, the R&D investment situation in Catalonia is strong. It positions Catalonia as having a very healthy contribution to R&D expenditure of the country. As mentioned before, the City of Barcelona contributes with approximately one third to the region's GDP and has recently committed, with the National Plan for Research and Innovation of Catalonia, to achieving an R&D expenditure of 2% of GDP by 2010 and 3.5% of GDP by 2020.

Figure 2.3. R&D expenditure in Spanish Autonomous Communities in 2006 (% Regional GDP)



Source: INE statistics

With respect to the R&D expenditure by sector, Catalonia is making efforts and has promoted the expenditure in R&D to meet the expected two-thirds private – one-third public distribution. The distribution of the R&D expenditure in the region of Catalonia matched the expected target, with 0.93% of the R&D expenditure out of 1.43% being made by the private sector (Annex Table 2.6).

Table 2.6. **R&D Expenditure over GDP, by sector**

	Catalonia				Spain			
	2003	2004	2005	2006	2003	2004	2005	2006
Total	1.37%	1.34%	1.35%	1.43%	1.1%	1.06%	1.13%	1.2%
Public administration	0.12%	0.12%	0.15%	0.17%	0.17%	0.17%	0.19%	0.2%
Universities (pub. & priv)	0.33%	0.32%	0.34%	0.33%	0.33%	0.31%	0.33%	0.33%
Private sector	0.92%	0.89%	0.86%	0.93%	0.6%	0.58%	0.61%	0.67%

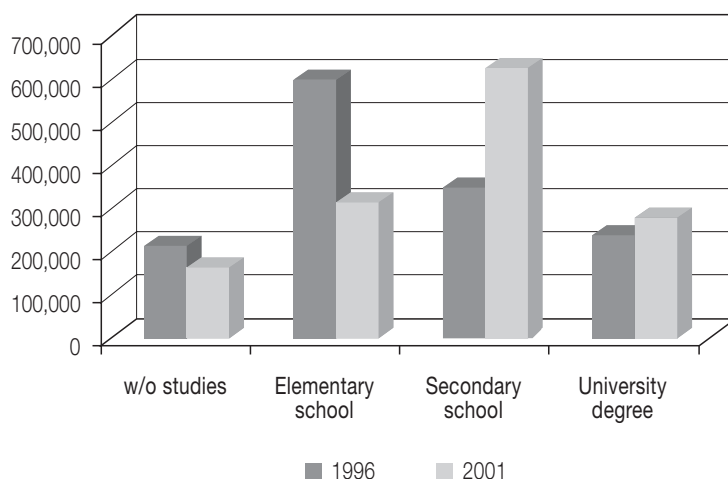
Despite the good performance showed by Catalonia and the figures well above the national average, more efforts need to be made in order to ensure an appropriate R&D&I environment. Barcelona makes a strong contribution to the regional GDP and therefore has an important role to play. In particular, Barcelona Activa is one of the key actors to stimulate R&D expenditure in the private sector and could therefore play a leading role in meeting this target.

An important critical mass of human capital

Barcelona benefits from the presence of internationally recognised institutions of higher education where almost 200,000 students study. Barcelona plays host to eight universities that belong to the Catalan university system, five are public (Universitat de Barcelona – the biggest in Spain with 85,000 students, Universitat Autònoma de Barcelona, Universitat Politècnica de Catalunya, Universitat Pompeu Fabra and Universitat Oberta de Catalunya, the latter an e-learning university), and three are private (Universitat Ramon Llull, Universitat Internacional de Catalunya and Universitat Abat Oliba). The education attainment of the population in Barcelona has improved considerably over the past few years (Annex Figure 2.4). The number of students enrolled in basic, secondary and undergraduate studies has increased, while those without studies have decreased. Barcelona is also home to two highly reputable business schools: IESE and ESADE.

Under these circumstances, it is clear that the City of Barcelona is in a continued renewal of its human capital and invests in the enhancement of the quality of its workforce. Moreover, Barcelona benefits not only from a better educated local population but also from an important number of foreign students that come to Barcelona to study. In 2006, 10% of the students enrolled in the eight universities in Barcelona were foreigners.

Figure 2.4. Maximum education attainment of the population in the City of Barcelona



Source: Idescat, Catalan Statistics

Barcelona is today a strong ‘brand,’ internationally renowned and well-positioned. The high quality of life in the city - the first placed city in terms of quality of life for workers, according to the European Cities Monitor 2008 - together with a high quality workforce supply and good connectivity with major cities around the world, make Barcelona an attractive place to live and work. Barcelona has the second largest international airport in Spain, the main seaport of the country and high-speed train connectivity with domestic and international destinations. The city benefits also from the presence of various international schools, open spaces for social events, and an important cultural offer. The city is a major tourist destination with more than 12 million tourist nights per year.

These assets turn Barcelona into one of the most dynamic places in Europe and very attractive for foreign talent. Today, the share of foreigners among the overall population in the city is slightly over 15% which shows the openness of Barcelona internationally. According to the Mercer Human Resource Consulting Worldwide Quality of Living Survey 2007, Barcelona ranks 41st in the top places to live worldwide with an index of 100.6 (New York=100). Barcelona moved up the ranking three places just between 2006 and 2007.

The main institutional framework

Building on the profile of the Barcelona economy given above, this section introduces the principal actors and guiding documents within the system of economic promotion in the city.

The City Council of Barcelona

It is clear that the City Council has played a strong role and provided the clear leadership required to take Barcelona successfully through rapid change. It has sustained energy and drive from key personnel and reflecting its capacity to attract talented employees. These characteristics have enabled it to gain credibility and to play to the strengths of a local authority in bringing together the key players and mobilising and facilitating investment. The City Council also convenes a strategic committee of economic promotion for the city, which brings together politicians, trade unions and business and voluntary organisations from across the region. This exemplifies its ability to get people round the table, reach consensus and develop strategy. This is all the more remarkable given the lack of any written guidelines and specific role in local economic development in its constitution.

The Economic Promotion Department of the City Council has played a major role in setting the conditions for business and facilitating financial capacity. The Department works alongside International Economic promotion which takes a lead role in trade development, market development and tourism.

Barcelona Activa

Barcelona Activa is the local development agency of the City of Barcelona. It was created in 1986 to promote quality employment and innovative businesses and started modestly as a business incubator coaching 14 business projects. Some 20 years later, its role and reputation has grown and it is the primary instigator of employment and innovation in the city. Its client group is drawn from different parts of the population and a distinguishing feature is its personalised offer to participants in its programmes. It has a modest budget but plays a central role in economic development in the city as the agent which designs and executes municipal policy in the field. One of Barcelona Activa's strengths is its capacity to be close to the City Council – President of Barcelona Activa is also the Deputy Mayor and has led on economic promotion – whilst also able to operate at arm's length.

Metropolitan strategic plan

The Barcelona Strategic Plan Association was created in 1988 to strengthen strategic approach to investment for the Olympic Games in 1992. Its role is to

promote economic and social transformation of the area which comprises 36 municipalities, covering 3.2 million inhabitants and an area of 628 km². It unites the strategy for the city and provides a platform for agreement and cooperation among the socio-economic institutions and the 36 municipalities of the Barcelona metropolitan area. Although it has no formal governance/institutional framework, it is accountable to the Mayor of Barcelona. Transformed from the Barcelona Strategic Plan, the first Metropolitan Plan was published in 2003 with a revision in 2007, although this is not yet formally adopted.

The organisation works through sponsoring projects across the Barcelona metropolitan area rather than coordinating economic development although it has specific responsibility for transport and environment bodies operating across the Barcelona metropolitan area. Previously it has supported ten strategic projects including housing, provision of services, planning, transport and the promotion of the quinary sectors. The focus for 2006 to 2010 is on knowledge, innovation, new ways of doing business – including the quinary sectors – and developing infrastructure and housing – including accommodation for migrants.

Chamber of Commerce

The Chamber of Commerce provides a strong focus on economic development in the city and has a wide-ranging role from sponsoring networks (e.g. business angels) and the Barcelona Trade Fair to lobbying and campaigning (e.g. for low regulation and for opening up air transport and campaigning for direct flights to). It is mandatory for all businesses to be members and it currently has 340,000 members.

The Chamber of Commerce has resisted a sectoral approach and has instead focussed on promoting internationalisation and inward investment. It has used the Barcelona brand heavily reflecting the choice that companies make over location decisions and desire of workforce to locate in places that provide a good quality of life. Together with supply-side approaches (e.g. promoting air routes and the doubling of the capacity of the seaport) the Chamber also operates on the demand-side. It works closely with universities and has developed a system by which businesses can directly approach them.

Regional development body

Though it tends to focus on macroeconomic issues and strategies the Regional development body can influence the operating environment. In more recent years, there has been a reorganisation of a number of strategies and initiatives to plan and deliver them at the regional scale, especially in relation to entrepreneurship, business development, internationalisation and competitiveness.

In other words, to maximise the dividend of regional activities and to compete internationally, a number of strategic activities are now coordinated at the Catalan level (regional scale).

On 17th February 2004, the Government, trade unions and business associations signed the Declaration for a Strategic Agreement to Promote the Internationalisation, Job Quality and Competitiveness of the Catalan Economy, an initiative that was relaunched for the period 2008-2011. This instrument of agreement between the government and the socio-economic agents is coordinated by the Department of Economy and Finance and includes amongst its priority action axes, support measures for technology transfer and for technology-based entrepreneurship, spreading entrepreneurship within the framework of Vocational Training, the development of funding tools for suitable business activities, measures for facilitating procedures for economic and business activities and the simplification of the administrative procedures or support in internationalisation. Moreover, from the financial entities promoted by this Department, such as the Institut Català de Finances (The Catalan Institute of Finances), or Avalis lines of credit and financial endorsements are awarded to SMEs.

In early 2008, The Department of Work for the Generalitat de Catalunya launched its plan *Inicia* (Start Plan) for the period 2008-2010. The plan deals with all aspects of self-employment and entrepreneurship from setting up business to business consolidation and relies heavily on local collaboration for its effective delivery throughout the Catalan region.

Catalan-wide business development is also supported by a relatively newly created agency called *ACCIÓ* Cidem-Copca, which is linked to the Department of Innovation, Universities, and Enterprises. The agency produces a range of measures for the support of business development in Catalan with the objective of increasing competitiveness, innovation and productivity. To meet these aims the agency provides expert support services, grants, loans, subsidies and builds collaborative networks.

As the heart of the Catalan region, Barcelona is fundamental to the success of these regional strategies and initiatives, and these regional strategies, in turn, have a strong impact on Barcelona.

Role of Central Government

The Central Government traditionally sets the framework for the legal system and many laws. It controls major infrastructure spending for the main road and motorway network, long distance and high speed trains and most local trains. The Central Government also allocates the majority of public funds and retains control over the Port of Barcelona and the city's Airport. There are also

a number of frameworks, plans, initiatives and funding streams which specifically target business development, many of which are relevant to Barcelona.

Approved in 2006 within the National Programme of Reforms, the Plan de Foment Empresarial (Business Promotion Plan), established the goals of ‘boosting entrepreneurship, increasing innovative and technology-based business creation, the simplification of the legal and administrative framework, the fostering of non-technological innovative capacity and the adoption of new technologies in companies, the increase of the international presence of the companies and the stimulation of their growth and competitiveness.’

The Ministry of Industry, Tourism and Trade through the Directorate General for policies for SMEs (DG Pyme) also plays an important role in the system of economic promotion in Barcelona. DG Pyme executes the policies of the State Government which are aimed at facilitating business creation. Also within the framework of the Ministry of Industry, Tourism and Trade, the Spanish Institute for Foreign Trade manages a number of initiatives aimed at internationalising the Spanish SME sector in order that they become more competitive at the global scale.

Other noteworthy initiatives include the funding of businesses which adopt new technologies and which engage effectively in R&D by the Secretary of State for Telecommunications and the General Secretary of Policies for Science and Technology respectively. It is important to note the Government Plan 2007-2010 as it sets an overarching framework for achieving a model with a balanced and sustainable level of competitiveness and a solid and diversified economic fabric.

2.3. Core knowledge base and innovation system

Despite the strength of Barcelona’s further education institutions, ICT and media clusters as well as the city’s thriving bio-technology sector, there is a feeling that the knowledge base is not, as yet, being translated sufficiently into commercial application. Many of those interviewed during the course of this review believed that the rate at which technology was being transferred into the market place needed to be enhanced. The level of entrepreneurial activity has to be lifted to reflect Best Practice elsewhere. A number of issues were highlighted during discussions. These included a perceived lack of trained specialised personnel in University Technology Transfer Offices, not enough experience in the valuation and commercialisation of knowledge and, partly as a result of this, fewer knowledge based companies being created. Moreover, those that were created did not seem to grow on a par with their counterparts in North America. It was also felt that there were not enough professional

managers in existing knowledge based companies and project development was relatively slow due to a lack of coordination and leadership.

Universities

The scale and importance of the city's universities was set out earlier in this chapter. The number of students enrolled during the 2005 to 2006 academic year and across nearly 400 degree subjects totalled 240,000 – 16% of the Spanish total. The three internationally renowned business schools raise Barcelona's profile and help to attract foreign students. They have become more international in last ten years and developed more courses in English to compete with United States market and in economics and management.

The universities are increasingly being seen as potentially playing a bigger role in local economic development, especially through special instruments devoted to high tech research such as the supercomputer in the UPC, the Science Park at the University of Barcelona, the Research Park at the Autonomus University, and the Spring Boards of the different universities aimed at connecting research and entrepreneurship. The Science Park at the University of Barcelona is devoted to spin-off companies from research results from the university, especially with regard to life sciences. This has succeeded in raising the entrepreneurial spirit in academia and a bridge between the university and commercial world.

A critical issue for Barcelona's Universities, and particularly those that have a research prowess in a relatively small number of disciplines, is how to support the critical mass required for inter-disciplinary endeavour given that 'cutting-edge' research often takes place at the margins of various disciplines. One way forward has been for universities to try and build as much inter-disciplinary research within their institutions as possible, but another approach has been to encourage the creation of collaborating centres of excellence built around a specific technology. The North Carolina Biotechnology Centre and the Scottish Intermediary Technology Institutes represent relevant examples.

Biotechnology sector

The Catalonia region has a particularly strong presence in the biotechnology sector with representation from some 12 universities, six science parks, a number of leading research hospitals, some 300 research groups in life sciences and biotechnology, over 50 biotechnology companies and about 100 pharmaceutical companies. Although impressive and gaining an international reputation, the Catalonia Government is keen to expand the sector further and increase the volume of R&D being undertaken.

Currently, however, there are a number of examples in the city of successes in the biotechnology sector. Below, two examples are offered:

- The Centre for Genomic Regulation (CRG) has the objective of promoting basic research in the biomedical field and, particularly, in the areas of genomics and proteomics. Founded in 2000 as an initiative on the part of the Catalan Government's former Department of Universities, Research and Information Society (DURSI).
- In 2006, the BioRegion Foundation of Catalonia was established to assist the development of the Biotechnology sector in Catalonia through the promotion of basic research, innovation and the encouragement of entrepreneurship and the commercialisation of research. Its Board has representatives from the Government of Catalonia, Barcelona City Council, companies, universities and hospitals.

The media sector

The Barcelona Media Innovation Centre (BM-CI) aims to boost the 'competitiveness of companies in the media sectors through the promotion of innovation and the bolstering of R&D activities.' It was partly developed out of the Pompeu Fabra University project. This centre is of major importance for Barcelona and the overall Catalonia economy, which has such a strong presence in media activity (with over 5% of the total employment base in the sector in 2003).

ICT

There are over 1.700 companies and 155 research stakeholders involved in Information and Communication technologies placing Barcelona as the prime location for Information and Communication Technology in southern Europe. The Barcelona Digital Foundation is a private not-for-profit organisation whose objective is to improve the competitiveness of the Information and Communication sectors in Barcelona and the wider Catalonia region. The Board of the Foundation comprises of the Generalitat de Catalunya, Barcelona City Council, Abertis Telecom, 'la Caixa', CapGemini, EDS, Fujitsu, ESADE Foundation, Hewlett Packard, IBM, Microsoft, Tecnom, Telefónica, T-Systems and Unitronics.

Building the capacity of the knowledge base and creating the innovation network

Deficiencies in the Barcelona knowledge economy are not believed to exist only in the areas of biotechnology and the life sciences but also extend to the

information and communications technology sector. These sectors are strong but also display relatively low levels of entrepreneurship. There are pronounced opportunities for joint working between the private and public sectors here. Some of those interviewed expressed the view that coordination between companies, entrepreneurs, research centres and other players including those who managed science parks should be improved. And even in the media sector, where Barcelona is well established, it was recognised that the sector had to seek new and developing markets and applications since the existing activity was heavily invested in relatively mature markets.

Issues such as these, suggest a number of actions to improve the process of technology transfer. Some relate to how the ownership of intellectual property is managed and in particular the role of licenses relative to academic spin-out activity. Attention has been given specifically to this in many countries. Now would seem a good time for Barcelona to encourage its universities to review their IP practice and to consider the scope for possible new incentive structures.

There is also evidence to suggest in the United Kingdom that the existing stock of IP generated by universities and other research institutions has not been used as effectively as it might be with some estimates suggesting that up to 30% of R&D projects are similar to ones that have gone before. Research into Patent informatics and, in particular, how IP is valued and monitored could pay dividends. Ensuring involvement of all of the relevant parties in the setting of standards is also another important area and the Race to the Top Report by Lord Sainsbury provides a good example of what can be done in the area of Nanotechnology in the United Kingdom.

Enhancing the skill set of those involved in the process of technology transfer has been a focus of the recent CMI-MIT initiative in the United Kingdom and a new training programme has been created that is aimed at technology transfer professionals working in universities, research institutions and industry. The programme features a range of courses lead by experts from universities, industry and government and features a mix of seminars, interactive workshops and case studies.

Many technopoles have sought to exploit and develop the relationship between their universities and companies and to find ways of ensuring that entrepreneurs can get the advice they need from lawyers, investors and other professionals and in a joined-up manner. A good example is the CONNECT programme started originally in the University of San Diego in 1985.

A further programme that it may also be of interest to consider whether there is the possibility of further application is the Knowledge Transfer Partnership

scheme that has been adopted in the United Kingdom. This programme is designed to help place people with the relevant qualifications from universities and other institutions in companies for up to three years in order to assist the companies to introduce new products and processes.

Another important area that should be given attention is how best to use the R&D procurement activities of public sector organisations (and indeed major public/private utilities such as gas, water and electricity) within the Barcelona, and indeed the whole Catalan region, so as to shape and encourage the exploitation of knowledge in universities and its translation into innovative products and processes. A number of initiatives have been tried to enhance the impact that public procurement can have both on the encouragement of user driven research in universities but also in stimulating innovation in the SME sector. An example here is the Small Business Research Initiative (SBRI) in the United Kingdom which, in turn, has sought to model itself on the highly regarded Small Business Innovation Programme (SBIR) in the United States of America.

Financing the enterprise

Securing the right volume and type of finance is a crucial factor in the development of technology based activity in an area. Clearly, different types of funding are required for companies at different stages of their development. And places themselves require access to finance to enable their knowledge based institutes to grow and access to the investment in the physical infrastructure that is so important in building the underlying attractiveness and capacity of the place.

Research into the relationships between finance, the stages of development of ideas and companies their connections to place, policy and sources of knowledge suggests a number of lessons for places that wish to sustain their technology base. These include the importance of finance for the development of embryonic ideas within universities and research institutions. The use of knowledge grants such as SBIRs in the United States and the SMART and SPUR awards in the United Kingdom is also important. There are many issues around how best to use venture capital funding to move companies beyond certain thresholds. These are areas that Barcelona active will need to pay more attention to in the short term, particularly given the constraints of access to finance in the current financial downturn.

Building the place

Technology producing companies are pretty demanding in terms of what they look for from a location. As discussed early in this chapter, when companies

start up the important issues were where the founders lived, their networks and contacts and the quality of the residential environment and social and cultural amenities. Workforce-related issues are the main factors that hold companies in place and particular so for young and medium sized companies. It is a highly competitive market place when it comes to securing IT and marketing and sales personnel where good people are virtually always in short supply. Attracting the right people could often be difficult because of high housing costs and/or a lack of quality housing.

Clearly, from the point of view of technology producing companies, the quality of a place is determined by their experience in meeting their ongoing needs. As these change, then places that aspire to remain attractive have to adapt or risk becoming relatively uncompetitive. The ability of the place to adjust its resource base in a mixed economy depends on policy actions by both the market and the public sector. Action is required to:

- Provide physical place and infrastructure.
- Provide appropriate premises and facilities.
- Enable social and professional place and thus provide environments that are attractive to technology workers and potential entrepreneurs through the development of the workforce; the fostering of networks and contacts; and the attraction of an entrepreneurial base.
- Brand and market the place.

Much has been done to build the required physical infrastructure in Barcelona to facilitate high technology based development. The provision of premises, including incubator units and starter units often in a science park setting is a good example. There are also some strong anchor facilities like the Synchrotron and the Mare Nostrum supercomputer. High technology based companies seek locations in a tightly bounded geographies in, and around, universities and other knowledge based institutions. The provision of premises has to reflect this. Barcelona's very success in stimulating its economy has lead to a premium being placed on premises that are accessible and in the relevant locations. Although there is a considerable amount of new development in the pipeline, most technopole locations find that they often have to run-hard to stand still to ensure that they are in the right place, accessible and affordable, particularly when it comes to the provision of incubator units. The documentation reviewed pointed to considerable attention being given to this, but the knowledge economy in Barcelona will always be competing with other economic sectors for scarce resources and the availability of land at the right price in the right place will always an issue that requires careful monitoring. On the infrastructure side, Barcelona's very rapid rate of economic development is

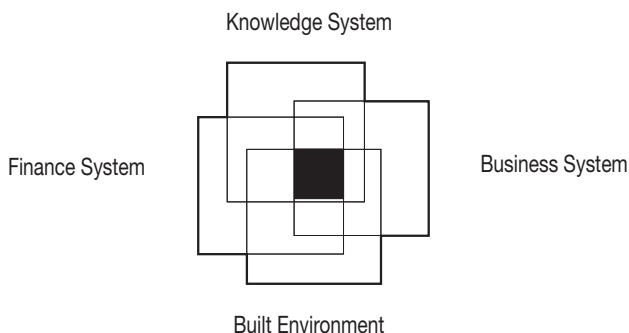
placing considerable strains on the capacity of the providers of key utilities, particularly electricity and water. New investment is required as a matter of some urgency. It is also important to have a stock of housing that caters to the diverse needs of those who work in the knowledge economy. At the present time, the cost of housing would appear to be quite significant for many of the technicians and other skilled workers who form an important part of what high technology companies look for from a location. The quality of the environment and access to good quality housing remain key components in maintaining the quality of the place.

Barcelona has been very successful at promoting and establishing its brand and name in the market place in many sectors. It is recognised, however, that there is a way to go yet in securing its goal of being the leading centre of such activity in southern Europe. It is also probably not possible to over-emphasise the importance of foresight and critical review, as well as monitoring and the evaluation of market position. Barcelona's development agencies have an established reputation in identifying and researching emerging trends. The work of the North Carolina Emerging Issues Institute is of particular interest here. It has been helpful in some locations to facilitate research that enables Technology Road maps for leading sectors that can help with the development of industrial and spatial policy.

It should also be noted that whilst there are significant benefits to a region from encouraging the growth of high technology activity, there can be significant tensions created in terms of sharing the benefits. Technology based activity, particularly when it moves from being simply research orientated and into production, can often create what has been termed 'hour glass' employment profiles with extremes of very well paid and not so well paid workers and not much in between. Because technology based activity tends to cluster in certain places it is also important to ensure that access to the jobs created is shared across the wider metropolitan area and indeed region. Some high tech regions have paid particular attention to this with North Carolina being a noted example.

Institutional change: collaboration in the place

If places are to secure and maintain a competitive edge in high technology knowledge based activities then it is essential that all of the relevant key players are involved in the capacity building process. The convention Triple Helix model has highlighted the importance of interaction between industry, government and universities and other knowledge based institutions. However, if this model is to be more appropriately rooted into considering what these interfaces mean for particular places it is perhaps more appropriate to extend it in the way presented in figure 2.5 (Annex Figure 2.5).

Figure 2.5. **A smart regional innovation system**

Source: Baxter, Tyler *et al* (2007), http://www.landecon.cam.ac.uk/staff/reports/PRI_ENTERPRISING_REPORT-1.pdf

The extension of the conventional triple helix Venn diagram into this format helps to spell out the crucial interfaces that the economic development agencies have to seek to manage at the present time. It indicates quite clearly that if the knowledge, business, finance and built environment interfaces are to be managed effectively then attention has to be given to how the boundaries of relevant interaction are spanned. This is not just to ensure better coordination, which is an issue we address further below, but is also to ensure that the substantial public and private procurement budgets of these players are considered as a driver force in the innovation system.

In Barcelona, and indeed the wider Catalonia region, there has emerged a plethora of organisations, agencies and bodies that play some part in this. However, ensuring that they join up and integrate their respective actions remains a challenge that has to be faced in the years ahead. One particular issue for those tasked with managing the process of economic development in Barcelona is how to integrate activity that spans the business interfaces like that currently being undertaken by Barcelona Activa and the more physical orientated activities of the 22@ Innovation district. A number of other such interfaces could be identified. There is also an issue as to how economic development in Barcelona is coordinated and linked with that of the wider Metropolitan area and the Catalonia region as a whole. The Barcelona Strategic Plan for Barcelona provides only limited insight at the present time and much work remains to be done here.

There can be little doubt that in a remarkably short period of time Barcelona has been able to do much to create a place that meets many of the above requirements, particularly on the cultural side. For instance, the provision of

shopping, night life, hotels and physical and recreational facilities is excellent. Much has also been done, or is being done, to enhance air, road, rail and sea communication. The air and road infrastructure was substantially upgraded in preparation for the Olympic Games and the new investment in the high speed rail network will further enhance capability in this respect. The port and sea access facilities have also been benefiting from a programme of investment.

However, the demands are such that there is much more needed. The capacity of the electricity grid is a factor. There are also a range of issues around the availability and affordability of housing. Many technopoles experience difficulties in maintaining the quality of their place as they grow and there a number of liveability issues around traffic congestion and the high cost of housing, both of which interfere with the recruitment and retention of key workers. Rising housing costs are a particular issue in Barcelona, where the average wage is relatively low and housing costs are already high.

All locations that seek to build their presence as a technopole have provided appropriate premises and facilities. Many science and technology parks have been established on the false premise that proximity to a university of research institute would be sufficient to enable companies to benefit from technology based spinovers, or would expedite the commercialisation of knowledge from the Knowledge Based Institutions. Alas, this has rarely been so. However, providing good facilities that enable high technology companies to be housed in facilities that give them flexibility, particularly in their start up and early stage of development phase, has been welcomed and there have been good examples of this in Barcelona, such as:

- Barcelona Biomedical Research Park (PRBB).
- Barcelona Science Park (PCB).
- Barcelona Nord Technology Park.
- Glòries Business Incubator.
- UPC Research and Innovation Park.
- La Salle Innovation Park.
- 22@ Innovation District

Box 2.1. The 22@ Barcelona Project

The 22@ Barcelona is an urban renewal project which is developing an innovative urban model that offers modern, technologically advanced, and singular flexible spaces for the top economic activities. The 22@ Barcelona project is also an economic development project which aims at stimulating the creation of a scientific, technological and cultural pole aimed at becoming one of the main platforms for innovation and knowledge economy in Spain and Europe.

The project involves the transformation of 200 hectares of land nearby the waterfront at the very heart of Barcelona. The 22@ district will permit the creation of up to 3.2 million m² of innovative firms, in addition to the 400 000 m² of new GFS for facilities, social housing and green spaces to guarantee the urban and environmental quality of the economic heart of the city.

The 22@ district has a good level of connectivity within the city and the metropolitan area, mainly through a well developed network of public transport. It also hosts a state-of-the-art infrastructure for telecommunications, waste collection, heating/cooling system and power supply. The presence of top level institutions such as the Pompeu Fabra University, the Barcelona Media Innovation Centre and the Parc Barcelona Media makes this district a very attractive place to establish a business and work.

Source: Barcelona City Council (2006), 22@ Barcelona, the innovation district

Building places that encourage technology based development require a number of elements relating to social and professional place. The three most important are the training of the workforce, the encouragement of entrepreneurship in the broadest sense and the fostering of business networks. Human resources are of critical importance to high technology producing companies and the importance of recruiting the required people has been emphasised in many studies over the years. The majority of companies in technopoles comment on the importance of there being a critical mass of technology based companies to attract skilled personnel to the area since this reduced the risk of moving to the area for all involved. Companies also identify the need to be able to update skills and retrain both technical and professional staff in a rapidly changing technological and business environment. Laboratory techniques, quality control and project management are frequently identified as key skills required. The ability of an area to be able offer on-going training and tailor-made courses and training packages is thus of great importance.

The provision of training and skills development is undertaken by Barcelona Activa and it offers vocational training to improve the knowledge and professional skills of workers in the city. This has been a relatively strong feature of the Barcelona economic development landscape in recent years. Cibernarium, hosted by the Technology Park is a joint project between Barcelona Activa and

Cité des Sciences of Paris. The project involves adaptation to new technologies – training to help with information and communication technologies. The future of the Human Capital Development as a new line of action for Barcelona Activa can add new services and competitive points to Barcelona.

Many places have sought to initiate actions that seek to build networking activity between business, academia and public policy makers. This can take a number of relatively soft or hard forms. The softer forms tend merely to facilitate networking. The harder forms may involve the creation of institutes that are directly mandated to help optimise and organise technology generation and exploitation and seek to more proactively take technology out to business. A recent example in Scotland is the Intermediary Technology Institute. The objective being to capitalise upon the areas existing strengths in science and technology to develop a critical mass of expertise and successful exploitation of specific market niches, facilitate the movement of staff between research organisations and industry and stimulate technology based companies to create their own demand for near-market research.

There have been a number of initiatives in Barcelona and the wider Catalonia region to foster and build the required networking process. Thus, recently, the CataloniaBio has been set-up which is an association of Catalan biotechnology companies in pursuit of the objectives of Catalonia to be the leading benchmark location for biotechnology in the South of Europe. In the aviation sector, universities and the Catalan business network work together on a number of projects. Barcelona Aeronautics and Space is a not-for-profit association that is seeking to develop the competitive presence of the region's activities in this sector. There are 12 universities. Training centres are supported by some 55 companies and Barcelona City Council, Generalitat de Catalunya and the Spanish Government.

At the regional level, Biocat is an organisation that seeks to work at the interface between government, industry and academia with the goal of seeking integrated thinking and the building of partnerships. Its priorities span the attraction of new investment from outside the region into the life science sector, the encouragement of new start ups as well as the provision of advice to existing companies in the biopharmaceutical sector in the region. The most successful areas for the development of technology based activity are those that place a strong focus on remaining at a leading edge in highlighting new research leads, agendas and ensuring good foresight and knowledge of global trends and developments. This foresight process is often accompanied by a vigorous evaluation and monitoring process through which the area seeks to continual benchmark its progress and relative competitiveness compared to other locations.

2.4. Strengths of the local economic development system

Considering the local economic development system as a whole, there are five key strengths in Barcelona that have contributed to its success. These include:

An active and pragmatic consensus

There is a strong partnership culture operating at many levels between the City Council and the many other players and organisations. Over time this has built up into credible and trusted relationships. A consequence of this is that it has allowed the focus to be on delivery rather than getting bogged down in strategy and a plethora of targets, agreements and performance management. The key players understand their role and the need to drive progress in the same direction.

Strong leadership from the City Council

The City Council should take much of the credit for creating the right environment in which this collaborative culture has developed. In recent years the city council has actively encouraged more collaboration between the universities, the council and business. It has also managed the relationship with Barcelona Activa in demonstrating strong cooperation but equally allowing Barcelona Activa to be ambitious and show leadership of their own.

Acknowledgement of a business-led growth model

There is a general recognition that Barcelona's transformation and future development has been based on a business-led growth model. This has driven the focus of effort into attracting companies and the innovative and enterprise culture that now predominates in the city. The public sector has actively acknowledged this and ensured that it plays a role that supports and facilitates this rather than competes with it. For example, this takes place in public infrastructure and management.

Development of a strong universal brand

Since the mid-1990s Barcelona has developed a strong brand about what it can offer businesses and the quality of life for their employees. This is universally accepted and promoted by all the key organisations and is clearly a unifying message. Barcelona uses international benchmarking and surveys to monitor progress and its relative success in promoting Barcelona as a location of choice for innovative businesses.

Location for creativity and innovation

The city has managed to transform its traditional industrial base into a diversified economy where high value added services and innovative products have

gained importance. In 2007 the Barcelona province is the location of most of the companies in high technology and knowledge services of Catalonia, and Barcelona is conceived as a place of innovation and creativity.

Chapter 3

Barcelona Activa: its role, key strengths and opportunities

3.1. An introduction to Barcelona Activa

Barcelona Activa, the local development agency, was founded in 1986 by the Municipal Authority of the City of Barcelona. It was conceived as a municipal limited company, which means that it is a municipal company funded by the Barcelona City Council. The creation of Barcelona Activa relied on three main conditions. Firstly, the economic restructuring that Barcelona was experiencing after the industrial crisis, with a large number of jobs lost and the closure of some of the main factories in the city. Secondly, the Barcelona City Council reached consensus and showed a strong political will to create a municipal entity to promote entrepreneurship and job creation as means for social inclusion and economic growth. Thirdly, the Local Government seized the opportunity to recuperate and made use of the empty premises of the Hispano Olivetti's factory.

The warehouse of the Hispano Olivetti was one of the icons of the industrial era of the city. The renovation of this derelict building, flagged the beginning of a change towards an industrial reconversion of the city. By establishing there the headquarters of Barcelona Activa, the agency emerged as an innovative tool and driver of local development of the city. The city economic development strategy defined and promoted by the local authorities was at the origin of the creation of Barcelona Activa. The strategy sought to achieve three main goals in the city, encouraged by the local public authorities, and which resulted in the three core activities of the city development agency.

Firstly, the development agency was created to promote entrepreneurship as a key contributor to the social cohesion and inclusion. Fostering entrepreneurship boosts the local economy which results in the generation of new employment and business opportunities for the community as a whole. The City of Barcelona was facing social exclusion, low economic growth and high unemployment rates at that time. Secondly, the development agency would support

and promote the business creation as means to jobs creation. In the OECD area, SMEs contribute to the generation of two-thirds of employment and are the main source of new jobs. And thirdly, the development agency should aim at promoting a culture of entrepreneurship and at stimulating innovation in SMEs and throughout the local economy. Both entrepreneurship and innovation contribute to the consolidation of an industrial tissue that can adapt and evolve together with the economic context.

The establishment of Barcelona Activa is therefore the key component of a well-thought strategy for the city. Today, Barcelona Activa has become a local, regional, national and international reference in terms of policies for the support of entrepreneurs and businesses, in the stimulation of innovation across the city, in the creation and improvement of professional opportunities for the population, and in the generation of new high quality jobs.

This chapter will analyse and assess the performance of Barcelona Activa, with the aim of identifying key strengths to be reinforced and arising opportunities to be harnessed in order to further develop its potential. This chapter will also provide an analysis of the key initiatives of Barcelona Activa, and will explore ways in which the development agency can gain a stronger position at regional, national and international levels.

3.2. Barcelona Activa and the City Council

The wide-range of public services and departments of the City Council vary in size and scope. However, they all seem to have a clear idea of the overall objective and strategy of the city, which is reflected in the good coordination among the entities. This open channel of communication between the regional ministries and the leader of the Council is also perceived in the actions and initiatives carried out by each of the public bodies.

As a municipal company of the City Council aimed at transforming Barcelona through the promotion of an integrated local economic and employment development strategy, Barcelona Activa was established under the responsibility of the Deputy Mayor for Economic Promotion of the city. Indeed, the promotion of the local economy is a shared objective between the City Council and Barcelona Activa.

Within the City Council, Barcelona Activa is in charge of business creation, business growth, human capital development, innovation promotion, and employment. Collaboration with other services in the City Council such as the international economic promotion department, the tourism agency or the city of knowledge has also taken place. The key actions undertaken by Barcelona Activa are coordinated with the overall strategy of the City with the aim to

facilitate the achievement of common goals. Barcelona Activa has also collaborated with some private institutions in order to better understand the needs of the community and create an environment prone to entrepreneurship, quality employment and innovation.

Barcelona Activa is highly collaborative, and acts as a pivotal body of the city authorities, benefitting from a privileged position between the public sector strategy and the private sector needs. This has allowed the agency to build credibility and achieve challenging goals with strong public support. In this sense, Barcelona Activa enjoys good will across the city and is perceived as the professional and trust worthy instrument of the City Council in the fields of policy design and execution. In the policy areas, Barcelona Activa provides the municipal policies and measures in support of business creation and growth and employment. As for execution, Barcelona Activa has a sound reputation in the effective planning and implementation of user-oriented programmes which stem from the policy design process. Few development agencies have achieved to position themselves as strongly as Barcelona Activa locally and internationally. The analysis of the agency's performance will identify some of the success factors that have contributed to this. A very important outcome of this policy design process is the Agreement for Quality Employment in Barcelona 2008-2011 (Annex Box 3.1).

Box 3.1. Agreement for Quality Employment in Barcelona 2008-2011

The Agreement for Quality Employment in Barcelona 2008-2011 is an instrument based on negotiations between the City Council of Barcelona, the two main trade unions (CCOO del Barcelonès and UGT), two main business organisations (Foment del Treball and PIMEC) and, for the first time, the Government of Catalunya. It defines and agrees the framework and priorities for developing active employment and local development policies in Barcelona.

The Agreement for Quality Employment in Barcelona 2008-2011, which builds on a consensus among the authorities about the Barcelona's growth model, promotes a quality and inclusive labour market, with a high level of productivity and one that generates professional opportunities for everyone, incorporating the innovation factor, to achieve social and territorial cohesion.

Some measures this Local Agreement for Employment will carry out are: to turn Barcelona into entrepreneurship capital and with the aim of attracting creative and innovative talent to the city; to build a mechanism of orientation, training and professional insertion, tailor-made for the people affected by the reconversion of sectors; to design a plan of shock for the socio-labour inclusion of youths who drop out of the education system, to design a programme of professional progress aimed at improving the human capital of the city of Barcelona, and, at the same time, another of the initiatives is related to the renovation and modernisation of the culture and value of work.

Source: Barcelona Activa

3.3. Barcelona Activa: an analysis of its performance

For the last two decades, the agency has been the key actor leading the shift of the city from the industrial era towards the knowledge and innovation economy by promoting quality employment and entrepreneurship with a sense of future. To achieve this, the development agency has favoured the development of various spaces (such as places for cooperation, for networking, virtual spaces) and has expanded its area of work to incorporate various employment and entrepreneurship programmes.

The entrepreneurship and innovation programmes offered by Barcelona Activa aim at promoting quality and future oriented employment and businesses through seven activity lines included in its Action Plan 2004-2007. The new Action Plan has been completed successfully and today Barcelona Activa is embarking on the 2008-2011 period under four big services and two transversal axes:

- Business creation and entrepreneurship culture.
- Innovative business consolidation and growth.
- Human capital development and new employment opportunities.
- Access and improvement of employment.

The two transversal activities identified by Barcelona Activa for the 2008-2011 period are: (i) the innovation promotion and (ii) the digital professionalisation and training.

Each of these areas has several cutting-edge programmes and initiatives that were thought to meet the overall objective of the Barcelona Activa Action Plan. The various activities have varied in scope and scale, and were developed during the 2004-2007 period. In the year 2007, Barcelona Activa provided assistance to over 150,000 participants in various programmes and services, all in line with the overall objective of its 2004-2007 Action Plan.

The 2008-2011 Action Plan of Barcelona Activa is now defined, and an in-depth assessment of the performance of the agency and the previous achievements would be beneficial for the identification of strengths and opportunities for the future development of the agency. The set of programmes and lines of actions are analysed below.

Business creation and entrepreneurship culture

This line of action aims at providing professional services for potential entrepreneurs in order to promote the creation of new businesses. It also seeks to

diffuse an entrepreneurial culture and the ‘learn to become an entrepreneur’ by coaching entrepreneurs and assist them in taking the step from the business idea to the creation of their own business. One of the key points of this line of activity is its special methodology, the one called ‘blended model’. It is the combination of a cutting-edge spaces aimed at making accessible and opened all the activities devoted to entrepreneurs, a wide range of more than 700 activities (from classical training, dissemination and knowledge capsules), personalised coaching, and a powerful website with contents, activities and self access tools in order to coach on line the business plan. The main initiatives carried out under this line of action are:

- The Glòries Entrepreneurship Centre: it was created in 2004 as a space open to the public where they can work on an idea and transform it into business. The premises of the Centre are located in the headquarters of Barcelona Activa, in the former warehouse. The entrance is free of charge and it is open to everyone, regardless of the idea. The space provides the users with the tools to prepare their business plan, with a set of activities to define and work their idea, with a group of professional advisors to assist them at the different stages, and with a complete set of services to facilitate the tasks of the entrepreneurs throughout the process.
- BarcelonaNETactiva: launched in 1999, this is a key instrument of the Entrepreneurship Centre which aims at e-coaching entrepreneurs via an online portal. BarcelonaNETactiva is the first virtual business incubator in Europe. Information and communication technologies were the base of this portal that contains information on services and online tools for the creation and new business consolidation. This activity is developed around a state-of-the-art multimedia application that facilitates the preparation of the business plan with virtual examples, tools and advice. This is one of the most innovative and ambitious tools developed by Barcelona Activa. It reflects the willingness of the agency to be in the vanguard of new technologies and innovation.
- The Day of the Entrepreneur: it began in 2001 as an initiative of Barcelona Activa with the aim to give visibility to the commitment of the local authorities to support the businesses and entrepreneurs in the city. This major conference provides a platform for exchange of knowledge, networking, learning and recognition to the entrepreneurs. This event has been successful thanks to the support of the various actors and close collaboration between the public and private entities of the city. This experience has also been transferred to other cities in Spain and Europe.

The activities dedicated to the stimulation of entrepreneurial capacities in the city have been very successful. In 2007, almost 1.200 businesses received advice and monitoring from one of the entrepreneurship programmes offered by

the development agency. There were over 700 companies created, being this 60% of business creation rate. The estimated new employment those companies create is around 1,500 new jobs per year. Barcelona is today at the forefront of entrepreneurship, being home to 1.6 million inhabitants and more than 100,000 businesses, one of the highest rates in Europe and the OECD. The spaces provided for networking, the online services, the personalised coaching and the innovative programmes are nowadays a model for various cities abroad.

Moreover, Barcelona Activa has become one of the key service providers of various cities in Europe and Latin America. The spaces offered for networking or for coaching entrepreneurs such as the online services, the personalised coaching and the innovative programmes, are nowadays a model used in cities like Bogota, Quito and Medellin. Others such as Anprotec, the business incubator and technology park association in Brazil, are going to adopt the same. Regarding the various technologies developed by Barcelona Activa such as the online business plan, the SWOT analysis of the ideas, or the strategic growth plan have been shared with cities such as Santiago de Chile, Buenos Aires, Montevideo, Bilbao, Rome and Andorra.

Finally, the Day of the Entrepreneur has become a reference in Spain and Europe, and nowadays many cities are replicating this experience in order to stimulate entrepreneurship, creativity and reward innovation. All the ingredients to innovate in the city are in place. Seed capital, places to network and other incentives are proposed by Barcelona Activa with success. Also, innovation inside the companies, the integration of talents from abroad and the promotion of collaboration between local actors have proven to be key factors of success in the most effective innovation systems, and Barcelona Activa is making it right.

Innovative business consolidation and growth

Innovation is today the key ingredient for industrialised cities to overcome locally the challenges of globalisation and the arising of the emerging regions. This line of action aims to facilitate the future of innovative recently created businesses by generating cooperation networks, stimulating innovation, and contributing to improving their competitiveness and growth. The activities carried out under this line of action are:

- The Business Incubator: in its origins, Barcelona Activa was a business incubator itself, hosting 16 projects in its first year of creation. By the end of the 1990s, three business incubators (Glòries, Nou Baris and Sant Andreu) served as spaces to develop high-quality enterprises, activate entrepreneurial cooperation and spread the culture of entrepreneurship. In 2003, the innovation and entrepreneurship activities concentrated in the

Glòries entrepreneurship centre, and the business incubator was created as a separate but complementary entity that remains in the same building. The business incubator has 60 open-spaced modules. Companies of up to 12 months old can establish there and stay for a maximum of three years. The businesses in the incubator have to be innovative, to have a potential for growth, to create jobs and have a committed team.

- **Barcelona Nord Technology Park:** this is the urban technology park of Barcelona created in 1998 by Barcelona Activa. The park has 10,000 m² dedicated to the economic activity of high added-value in the north area of the city. This park is open to young tech companies (especially in engineering) that are seeking to expand their activities. After three years in the business incubator, the companies from Barcelona Activa can also move to this technology park. The companies can stay as long as they want with a space constraint, and benefit from high quality services and infrastructures, including an auditorium, meeting rooms, reception desk, cleaning services and other added-value programmes such as advisors, training and participation in joint business activities.
- **Business growth programmes:** these are aimed at facilitating growth for highly innovative new companies. The growing strategy of Barcelona Activa is based on facilitating access to funding, access to local and especially global markets, and facilitating tools, experts, mentors for improving management. Barcelona Activa has been pioneer in Spain introducing Anglo-Saxon methodologies such as investment readiness seminars. It also facilitates global growth through seminars, and technology bridges where a selection of companies travel to global innovative hot spots and they have a complete agenda of contacts and they receive training for internationalisation.
- **Ready for Growth:** this programme was created in 2002 with the objective of facilitating the access to capital for new business projects with a strong innovation component. The programme offers a series of seminars for entrepreneurs in small businesses with high growth potential. It operates mainly in the e-content sector, enabling them to access the finance needed for their growth. This started as a joint programme with the local development agency of London.
- **Business cooperation programmes:** with these programmes, Barcelona Activa organises a wide range of different activities aimed at making companies meet and exchange with others in order to increase business opportunities and growth. In a city especially based on micro companies and SMEs, these activities are crucial in order to build alliances and partnerships between companies. The network of enterprises Xarxactiva was created in 2004 as a source of experience and a platform of exchange for

entrepreneurs that have participated in some of the Barcelona Activa's programmes for business creation and growth. The network involves also the participation of experienced businessmen that share their know-how and contacts with younger entrepreneurs. In 2007, Xarxactiva counted on over 600 members and had more than 3,000 persons involved in its activities. Among others, the activities carried out by Xarxactiva are: conferences, business tours, business prospection, technical workshops, capacity building seminars, online chats and so on.

- **Barcelona Empren SCR:** it was created in 1999 by Barcelona Activa and the City Council of Barcelona. This is the first venture capital fund aimed at financing start-ups and innovative SMEs. The City Council has a minority capital and the fund counts on 19 participant companies and financial entities from the private sector. The social capital of Barcelona Empren SCR is EUR 9 million.

Despite being one of the most recently created, this line of action is one of the more ambitious and has so far resulted in very positive impacts in the city, not only in terms of business competitiveness but also in terms of number of jobs created. The business survival rate after the fourth year has attained 84% for the companies in the incubator and, on average, at the fourth year they employ of 9.8 employees and their annual turnover at the fourth year is EUR 980,000.

It is important also to stress that the incubated companies in Barcelona Activa are well trained and have excellent results in fund raising. In 2007, they raised EUR 24,000,000 in private funds and EUR 9,000,000 on public funds for R&D. Up to 75% of companies in the incubator and technology park have commercial relations between them, and around 50% of them have businesses in the international market.

Finally, it is worth highlighting that there has been an important shift in the Barcelona's business incubation system, and Barcelona Activa has been behind this change of concept. Until recently, public incubators were seen as a space to 'help' newborn and weak companies. Today, Barcelona Activa's business incubator and programmes for entrepreneurial growth are perceived as cutting-edge spaces for innovation and growth. That means that many highly innovative companies are actively looking for spaces within Barcelona Activa. They don't see the Agency as an institution to 'help' entrepreneurs, but rather as a facilitator for growth.

Human capital development and new employment opportunities

This line of action promotes Barcelona Activa as the meeting point for human capital in the city of Barcelona, by increasing the professional opportunities

that the new work cultures, the new occupations, and the emerging economic sectors offer to the population. The programmes are defined based on the prospective labour and skills demands of the economic sectors. The activities seek to develop the workforce in the evolving context of the labour market and to reduce the mismatch between the offer and demand of skills in the labour market. They also aim to improve local production processes and harness better the skills available locally, thereby leading to higher quality jobs and a more competitive local economy. The main activities are:

- **Porta22:** created in 2003, this is the metropolitan reference for new occupations and economic sectors in transformation. It facilitates the access to information and knowledge in relation to new professions, innovative sectors and new cultures of work. In 2007, the intranet of Porta22 contained over 700 professional profiles in 13 economic sectors, various testimonials and other tools to assess the user's skills and fields of interest. More than 35,000 participants have received attention in Porta22.

Barcelona Activa is leading the wave worldwide in this area, mainly through the Porta22, a member of the international network Cité des Métiers. The sophistication of the Porta22 system, its objectives and the impressive amount of information available is unique in the world. This is a highly resources demanding programme, but Barcelona Activa is already harvesting the success of this investment. Employment in highly competitive sectors and the development of new economic sectors in the 22@ district is being possible in part thanks to this innovative tool. It is not only an efficient tool for the local population, but also an attractive tool for investors and entrepreneurs looking for new places to invest and grow.

Access and improvement of employment

In this line of action, Barcelona Activa seeks to inform, orientate, motivate, train, and promote employment in Barcelona. This axis of work contributes to update the professional skills of the jobseekers or those wanting to improve their professional career, and also to promote labour inclusion by responding to the needs of the companies. The facilities are:

- **Can Jaumandreu:** this is the centre for the improvement of professional occupation that is located in the renovated premises of a factory from the industrial era. Can Jaumandreu offers vocational training programmes spaces for the access, inclusion and improvement of the employment. In particular, it provides the following services: programmes of labour orientation and insertion for the unemployed; job search services; programme for labour insertion; training in the field of business administration; and workshops on trades.

- **Sant Agustí Convent:** this is also a space of reference for the Barcelona Activa programmes for labour inclusion, but with a special focus on people with special difficulties. The Convent de Sant Agustí carries out the following activities: point of information and development for the Socio-labour Insertion Programme; location for the Socio-labour Insertion Network of Barcelona; attention point for the Youth Plan; programming of seminars and activities for professional orientation and job search; labour orientation and insertion programmes for the unemployed.

Inserting the unemployed and the under qualified into the labour market is a challenge of most of the OECD cities and regions. The programmes and infrastructures of Barcelona Activa are state-of-the-art and reflect the inclusive approach and the social concern of the public interventions in the city. Can Jaumandreu and Convent de Sant Agustí are two historical buildings that reflect today the new vision and ambition of the city. The population is involved and directly beneficiary of these initiatives: the rate of insertion has attained 72% in 2007, and there were over 20,000 participants in the various programmes offered.

Moreover, the current economic situation demands for programmes and services to be implemented quickly and flexibly in the main OECD cities and regions, in order to tackle the increasing unemployment and restructuring of important economic sectors. In this sense, Barcelona Activa, together with the employment service of the Catalan Government, has designed and launched at the end of 2008 a new initiative for the professional improvement and guidance of the new unemployed in the city (Annex Box 3.2).

Box 3.2. Action Plan for professional improvement and guidance for new unemployed in the city of Barcelona.

Given the context of economic slowdown and the significant increase in unemployment in 2008, the Barcelona City Council has launched an action plan for guidance and professional improvement of the unemployed in the City of Barcelona. This plan constitutes a decisive and concerted action by the Barcelona City Council, through Barcelona Activa, and the Labour Department of the Generalitat de Catalunya (regional government).

Named «Activate for Work,» the programme is designed to respond quickly and flexibly to the new unemployed in the city, adapting the offer to their needs, so that the unemployed keep active and increase their chances of re-entering employment.

The programme is a highly innovative and pioneering initiative among local and national employment promotion policies facing the new challenges of the job market, and it will serve 16 000 unemployed people in a year.

Source: Barcelona Activa

More specifically, on the field of training, Barcelona Activa seeks to improve the professional skills and capacities of workers in order to bring them closer to the new demands of the knowledge society. The activities aim at developing the workforce in the evolving context of the labour market. The activities are:

- **Ca n'Andalet:** this is the Centre where all the activities linked to training and skills development are designed and partially developed by Barcelona Activa. It is the reference in the improvement of knowledge and professional skills in the city. The centre offers various services, including: vocational training aimed at upgrading the skills of the low-qualified and the unemployed; training in new technologies and business management; and professional certification. This training centre is now specialised in training on the personal services sector, one of the emerging sectors in the city.

The design and implementation of skills development programmes are not easy, as they do not only involve skills upgrading but also productivity enhancement. With this line of action, Barcelona Activa is working effectively towards meeting the long-term business needs while building capacities in the new sectors. It seeks to improve local production processes and harness better the skills available locally, thereby leading to higher quality jobs and a more competitive local economy. Over 2,000 participants were registered in the activities of the Centre Ca n'Andalet in 2007.

Finally, as a transversal activity, Barcelona Activa promotes the digital professionalisation and training. This line of action seeks to train the population on the use and utility of the information and communication technologies. The objective is to turn the new technologies and their applications into a professional development tool for people and companies regardless of their kind of activity or business sector. The main actions are:

- **Cibernarium:** hosted by the technology park, the Cibernarium was born in cooperation with Cité des Sciences of Paris. It is the centre for digital diffusion and literacy that aims at disseminating the new opportunities that knowledge society and, particularly, the new technologies offer to the personal and professional development of students, jobseekers and enterprises. The Cibernarium trains the population in the use and utility of the information and communication technologies.

In the adaptation of the new technologies, Barcelona Activa has also had a great success. Over 53,000 participants were registered in 2007 in the Cibernarium. The result will also be reflected over the time by the number of new internet users and the capacity of the population to access other services

offered by Barcelona Activa, online. The partnership with the Cité des Sciences of Paris is also a positive element that puts Barcelona in the top cities in Europe leading the change towards the information and communication technologies. The methodologies and contents developed by the Cibernarium have also been successfully transferred to other cities worldwide, such as Quito, Sao Paulo, Porto Alegre, David (Panama), Maule (Chile), Brussels, Tampere or San Sebastian.

Another cross-cutting activity is the promotion of innovation and creativity, through which Barcelona Activa promotes values related to entrepreneurship, innovation and creativity within the City of Barcelona. It highlights Barcelona Activa's specific programmes in these areas and designs new projects to foster these values. One of the most important outputs of this activity is the Barcelona Research and Innovation Map (Annex Box 3.3).

The wide array of programmes and initiatives carried out under these lines of action has directly influenced the economic and entrepreneurial fabric of the city. The results of Barcelona Activa for 2007 show a high rate of net businesses and jobs created, and an important number of businesses coached (Annex Table 3.1).

Box 3.3. The Barcelona Research and Innovation Map

The Barcelona Research and Innovation Map is a web application which allows the user to easily locate all centres, institutions, companies and financial entities at the forefront of research and innovation within the city and in the metropolitan area.

In its first stage, the map includes 246 entries, from research centres to entities for Financial and Innovation Support, environments for innovation, and business best practices. The application not only locates these centres geographically, but also allows users to discover their main innovative facts, contact details, videos and links to relevant and related information.

The Barcelona Research and Innovation Map is part of Barcelona's city council Promotion of innovation activities, which aim is to foster the city's capabilities and potential in these areas.

Source: Barcelona Activa

Table 3.1. Barcelona Activa main results (2007)

	N° of participants: (companies or persons)	Number of jobs created	Main results
Business creation	15,994**	1,500 jobs	1,189 business projects coached and 700 companies created
Innovative business consolidation and growth	3,760	848* jobs	84% survival rate fourth year
Human capital development and new employment opportunities	36,222	N/A	Improving human capital of 3,000 active people
Access to and improvement of employment	20,651	2,500 jobs	72% of labour insertion
Digital professionalisation and training	53,510	N/A	8,263 participants in business technology training
Total	140,044**		

* Total jobs of all companies in the Glories Business Incubator and in the Barcelona Nord Technology Park

** This figure shows the total number of participants in physical persons and not in number of companies

Source: Barcelona Activa

Some 20 years after its creation, the outcomes reflect the significant positive impact of Barcelona Activa's actions in the city's economic scene. The unemployment rates have dropped, the number of businesses in the various key economic sectors has increase considerably, and there is an important inflow of investors and human capital to the city. Barcelona has managed to move from a slow economic growth to an ever faster growing city. The businesses are creating new and better jobs, and the rate of survival of businesses (particularly those in the business incubator) has improved to 84% in the fourth year since its creation. Barcelona Activa is reaching out to a wide audience. The agency has accompanied over 1,100 new business projects and has provided assistance to more than 40,000 potential entrepreneurs on issues related to business creation and business growth (Annex Table 3.1 and Table 3.2).

Table 3.2. 20 years energising the future

1,008,303 participants
11,892 business projects coached
7,000 new companies created
574 companies coached for growth
40,431 people being trained
100,000 unemployed people oriented and coached for employment
326,999 people acceding to tech. knowledge and training

Reaching out to a broad audience is indeed positive as a larger share of the population can benefit from the services offered by the agency so as to be better adapted to the changing economic conditions. With strong institutions as Barcelona Activa and a consolidated system, the city of Barcelona is well prepared to face the challenges arising from globalisation. The city’s capacity to develop, attract and retain highly-skilled human capital, an entrepreneurial culture widely spread, and the trustworthy environment for businesses and investors are factors that have strengthened Barcelona significantly. Today, the city is well-positioned internationally and thus better prepared to face the economic and financial turmoil of the changing world.

3.4. Key strengths of and opportunities for Barcelona Activa

The previous analysis of the performance and achievements of Barcelona Activa has demonstrated that a strong capacity and know-how have cumulated in the agency over the past few years. In view of the definition and implementation of the 2008-2011 Action Plan of Barcelona Activa, the OECD LEED Programme has identified some key strengths and opportunities that should be taken into account in order to push further the boundaries of the agency’s capacities to promote entrepreneurship, innovation and high quality jobs in the Barcelona, as well as to remain the reference as an efficient local development agency worldwide.

Content and programmes

Effective programmes within a strategic Action Plan

In order to meet the objectives of promoting quality and future oriented employment and businesses in the City of Barcelona, the local development agency has defined a set of innovative programmes over the past few years that have become a reference to development agencies abroad. These programmes and initiatives have been implemented by Barcelona Activa itself,

with the support of the City Council and in collaboration with other public and private entities of the city. These have been structured under each of the seven axes of work of the Action Plan.

Entrepreneurship capacity

Entrepreneurial capacity is important in the city because it creates new business activity and increases innovation, employment, and competitiveness in the productive tissue. Barcelona Activa has been the changing engine in the city and the results are tangible. Since the creation of the local development agency, Barcelona has turned into an entrepreneurial city maintaining and further developing its creative background. Barcelona Activa has been very successful in building a strong entrepreneurial and innovative environment in Barcelona and this should be pursued.

Business creation and growth

Barcelona Activa has an outstanding performance concerning business creation and business growth. The figures of the number of enterprises created over the past years and the higher survival rate of those created under the aegis of Barcelona Activa are proof of the positive impact of the agency's programmes and tools for business and potential entrepreneurs. However, the low number of university spin-outs reflects that the universities and research centres are lagging behind in the entrepreneurial activities. Hence, the agency could seize the opportunity of having the expertise to assist the top level universities in the city develop their entrepreneurial capacities. Barcelona Activa already acts a vehicle to transfer knowledge from universities and research centres to the business community through the new companies created in the business incubator. There is a place to do this more formally, as a closer collaboration between universities and the business community is an essential factor to pursue the city's successful performance.

Furthermore, if Barcelona wants to become a major city based on diversity, emerging sectors from 'soft' industries are also important to be developed and supported by the development agency. Indeed, Barcelona has been historically a creativity cradle where painters, architects, musicians and all sorts of artists would be given the opportunity to develop their idea and turn it into a business. With the arrival of a large number of immigrants to the city, and the presence of a well-established creative industry, it would be important for Barcelona Activa to be prepared to meet the needs of these new potential entrepreneurs. On the one hand, there is space to develop a stronger branding and communication of Barcelona Activa's programmes and initiatives would be helpful for newcomers to the city. This would facilitate the identification of local instruments and support mechanisms to start an activity and add value to

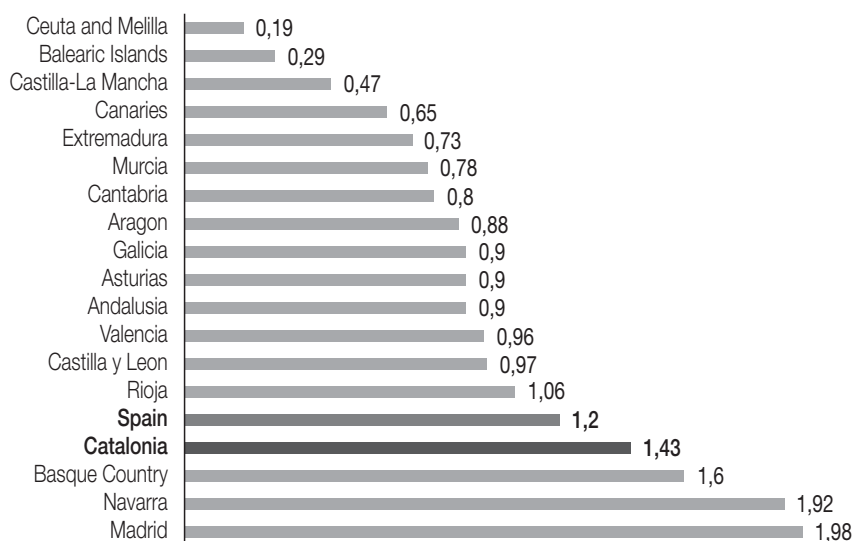
the economy. On the other hand, the development of customised programmes on creative sectors or those from the soft industry would be beneficial.

An engine of innovation and R&D in the city

Barcelona Activa has contributed significantly to the research, development (R&D) and innovation activities in the city. According to figures for April 2008 provided by the Research Institute of Applied Economics (IREA) of the University of Barcelona, the City of Barcelona itself contributes with approximately one third to the overall region's GDP. As shown below, compared with the other Spanish regions, the R&D investment situation in Catalonia is strong, and positions Catalonia as one of the leading regions in R&D expenditure of the country (Annex Figure 3.1). However, the R&D expenditure in Catalonia remains well below the Lisbon target of 3%. Hence, there is an opportunity for Barcelona Activa to focus more on the innovation capabilities in order to support the region in meeting the Lisbon target by 2010.

There is also the opportunity for Barcelona Activa to expand the innovative culture among companies outside its incubator in order to increase innovative mindsets and awareness of the necessity of innovation. This would enhance the entrepreneurial capacities and innovative environment across the city, and

Figure 3.1. R&D expenditure in Spanish Autonomous Communities in 2006 (% GDP)



Source: INE Statistics, 2008

would contribute to increase the potential of current small enterprises, eventually leading to their growth and thus to more job creation in higher added-value sectors.

Barcelona Activa could play a key role in promoting innovation in the city through a local benchmark. INGENIO 2010 is the Spanish benchmark and includes ten R&D&I commitments in a bid to converge with other European countries by 2010. It includes a commitment by the Spanish Government to increase the R&D&I budget by 25% each year in order to meet the commitments of the Renewed Lisbon Strategy. Barcelona Activa could capitalise on its closeness to the local industry, the research centres and the universities in order to act as an institutional bridge between them. This would contribute not only to meet the Lisbon objectives, but also would support the SME growth in the development of the industrial tissue of the city, generating more and higher quality jobs.

Employment

In only two decades, the City of Barcelona has shifted from a precarious situation with high rates of unemployment, to become one of the European cities with the lowest unemployment rates and offering good quality jobs in various innovative sectors. Barcelona Activa works closely with the universities and the business sector to try to bridge the gap between the offer and the demands of the labour market. Barcelona has competitive advantages in strategic areas such as biomedicine, supercomputing, ICT and creative industry. The agency, through its Porta22 and the employment units, does outstanding work in increasing the visibility of the new job opportunities in these areas. However, Barcelona Activa has the opportunity to prioritise some of its activities and put more efforts in raising awareness among the population on the priority economic sectors in the city and the new employment needs.

People attraction

Building on the strong immigration to the city, and capitalising on the presence of internationally recognised universities, research centres and enterprises that will eventually generate and attract more human capital, Barcelona Activa has an opportunity to expand its investment on workforce development to attract and retain talents. This could be a complementary programme to the very successful activities already carried out in the agency to train the under-employed or the low qualified. Workforce development in the enterprises could be carried out in collaboration with the business sector and the universities, in order to guarantee a top-level force in the labour market.

In this sense, Barcelona Activa is launching a pioneer initiative to attract entrepreneurial, creative and innovative global human capital and to coach its successful establishment in the city, under the name Do it in Barcelona (Annex Box 3.4). This initiative will be launched in cooperation with the main institutions in support of talent attraction of the city and the region.

Box 3.4. The ‘Do it in Barcelona’ Programme

Barcelona is placed in the international rankings as one of the most attractive cities in Europe for doing business, a node of qualified human capital with a high quality of life and first level business and logistical infrastructures and connectivity with the rest of the world.

The Do it in Barcelona Programme is a local strategy for the attraction of global entrepreneurs and human capital in Barcelona. Its main mission is to attract entrepreneurial, creative and innovative global talent and coach its successful establishment in the City of Barcelona

The programme will specifically develop a new city marketing strategy for a new generation of talent and tailor-made facilities that will provide the targeted global talent a first contact and soft landing services in order to know and make them aware about the opportunities that Barcelona offers for those people who want to start a business, make its company grow or find a high value added job or research opportunity in the City of Barcelona. After this first contact the programme will offer sound knowledge of the business and labour market potential of the city and concrete programmes and facilities of support to entrepreneurs and human capital.

The programme will be based within a strong public private collaboration and also with the involvement of the main socioeconomic agents and administrations of the city and the metropolitan area.

Source: Barcelona Activa

International promotion of the city

Furthermore, as economic development of a city increasingly depends on promoting the city globally, as a place to invest or to locate or to hold a major event or spend a holiday, Barcelona Activa could help to promote Barcelona and Catalonia not only from a national perspective but also by including global perspectives. In collaboration with the international promotion department, Barcelona Activa has the means and capabilities to internationalise its activities in order to guarantee the city and the region a place in the top list of places to live, to work, and to invest.

Achievements

Local value added

The transformation of the economic structure of the city of Barcelona, from an industrial site into a knowledge-intensive hub has been very successful. As shown in Figure 3 in chapter 2, the number of employees in high-tech and knowledge-intensive service sectors account today for almost a quarter of the total employees in the service sectors. Barcelona Activa has made some important contributions to the transformation of the city. Indeed, on the one hand, the agency has pioneered in forecasting new employment niches in the emerging sectors. Moreover, it has promoted the adaptation of the capacities and skills of the population in order to meet the new demands of employees, tackling unemployment. The agency has also encouraged entrepreneurship and business growth in knowledge-intensive and high value-added sectors in the city to attaining a strong critical mass in these sectors that places Barcelona as one of the leading cities in the world.

Today, it is still perceivable the entrepreneurial and innovative environment that stimulates the creation of new small firms and the transformation of new ideas into businesses. Barcelona Activa has put efforts in making this happen by providing spaces to innovate, by stimulating networks and collaborations, and by providing high-quality services to potential entrepreneurs regardless of their kind of idea. This has added high value to the city, and has had positive impact not only in developing the entrepreneurial capacity of the population, but also in attracting new talents from abroad seeking to innovate.

Organisational effectiveness

Staff numbers and budgets are modest

Part of the success of Barcelona Activa is due to the effectiveness and high productivity of the organisation. Despite a limited number of staff working in the agency and a modest budget (see table below), the local development agency ensures high quality professional services that are innovative and constantly adapting to the community's needs. In 2007 Barcelona Activa counts on a permanent staff of 99 people and it engages temporary staff according to the needs of each of the executed programmes.

As per its budget, the income of the agency in 2007 was around EUR 24 million, coming from the direct contribution of the City Council of Barcelona (46%), the Government of Catalonia (35%), the management of its own assets (11%), the European Funds (7%), and the funding from other institutions (1%). It is important to note that the funds received by Barcelona Activa from

the different public institutions and administrations are gained through the submission of innovative and successful projects to public tenders and calls for proposal and, therefore, are gained under a process of open competition.

The executive staff of the agency is highly capable and well trained in the core elements of the programmes offered. The programmes' material and facilities are also practical and top quality, despite the modest budget allocated to them. Moreover, the service is client-oriented and tailored to the needs of the entrepreneur which has been reflected in the important number of business created and of participants in the different activities.

Table 3.3. Barcelona Activa: Expenditures by Activity Line (2007)

Activity line*	Budget allocation (EUR)
New Employment Opportunities (Porta22)	1,385,000.00
Access and Improvement of Employment	13,325,000.00
Training and Skills Development	2,975,000.00
Foster Entrepreneurship	1,150,000.00
Business Consolidation and Growth	3,150,000.00
Promotion of Innovation	990,000.00
IT Skills Acquisition and diffusion	850,000.00
Promotion of employment in Aerospace Sector	1,000,000.00
TOTAL	24,825,000.00

* Activity lines included in its Action Plan 2004-2007

Source: Barcelona Activa

Top level facilities

Moreover, the buildings and facilities of the agency are top quality, innovative, visionary and with high technology standards. The business incubator, the technology park, and other facilities are state-of-the-art and are proof of the strong willingness of the public authorities to support the innovation process and to pursue a long-term investment strategy in key sectors of the economy.

Identity and brand

Strong identity and brand

The 'Barcelona Activa' name is nowadays a reference to other local development agencies worldwide. It is acknowledged to be a professional service

provider that stimulates business creation, business growth and an entrepreneurial environment. It is recurrently used as a good practice and has served as model to other development agencies in Europe and Latin America. The increasing demand of Barcelona Activa's product, services and advice not only locally but also across Spain and abroad, evidences the successful brand and strong identity achieved by the agency.

Also, to expand and regenerate the human capital critical mass in the identified key sectors, Barcelona Activa has to pursue the programmes to build capacities in the local workforce, but should combine it with a proactive strategy to attract and retain talents from abroad. The agency is well positioned and has longstanding partnerships with various stakeholders across Europe and Latin America to achieve this goal. These international platforms are therefore an opportunity for Barcelona Activa to act as the promotion development agency of Barcelona abroad.

Leadership and capability

Excellent political leadership and support

The local development agency works under the responsibility of a Board of Directors currently chaired by Mr. Jordi William Carnes, who is also the Deputy Mayor for Economic Development at the Barcelona City Council with strong connections and competences with the economic world and also in charge of the city's economy and its budget. His predecessor, Ms. Maravillas Rojo, who chaired Barcelona Activa for more than 10 years, was vital in the establishment and development of Barcelona Activa and its innovative programme of work. The Managing Director, Mr. Mateu Hernández leads the agency independently and ensures that the activities carried out meet the innovation and entrepreneurship needs of the community in line with the city strategy.

Barcelona Activa works under the aegis of the Economic Development Council and this structure has proven to be efficient and very supportive of the agency's activities. There is a clear internal vision of the overall city strategy, reflecting in a good coordination between the Barcelona City Council, its public bodies and the Barcelona Activa team. Also, the development agency has established close partnerships with other public agencies (PPP sectorial entities) in order to build synergies and contribute to the overall strategy of the city. To date, more than 370 collaboration agreements have been signed with various social and business entities that work jointly with Barcelona Activa to deliver programmes and services in the community.

Wider civic support is real

Barcelona Activa benefits from an outstanding public and civic support across the city. The agency is well recognised and all the actors in Barcelona acknowledge the added-value of Barcelona Activa. It also has a strong commitment towards public-private partnerships, reflected in its ambitious work programme. An opportunity to seize is the expansion of the agency's interventions locally by further involving the civil society and the private sector in its programme. Both the leadership and strong partnerships give Barcelona Activa a pivotal position to make a more significant contribution to the overall city strategy while responding to the needs of the business community and the population.

*Relationships and goodwill**Highly collaborative*

The local development agency has achieved to create strong synergies with various public and private stakeholders of the city. Open communication with its stakeholders and a collaborative approach with other partner institutions have been essential in the consolidation of Barcelona Activa as the most innovative and effective tool of the City Council. There is an opportunity to develop more formal and stronger links with other private and public actors of the Barcelona context should be sought in order to reach out a wider audience at all levels.

Good will across the city

Barcelona Activa has been successful in franchising its products and services to other regions in Spain and abroad. With the remarkable economic recovery of Barcelona, the programmes and policies implemented in the city are seen as successful tools for local economic development locally and nationally. In addition, the good perception and strong brand of Barcelona Activa adds credibility to the products and services, which make them very demanded among policy makers and practitioners.

In this sense, Barcelona Activa has the opportunity to provide tools, programmes and infrastructures not only locally but also internationally by creating a Barcelona Activa brand. The agency has various partners that rely on its capacity to develop the workforce, to foster entrepreneurship and to boost the local economy. Barcelona Activa has the opportunity to capitalise on this network of trust to go beyond the provision of local services, to the marketing and commercialisation of the Barcelona Activa brand, with innovative products and services that have proven to be effective. This would not only enhance the

agency's visibility, but would also generate supplementary incomes that would give it more flexibility in its mandate.

Asset with regional and national authorities

Taking advantage of its credibility and good positioning, Barcelona Activa has been extremely proactive in transferring its programmes and advising other regions on how to develop tools and policies for local economic development. Among others, Barcelona Activa has supported the creation of the Santiago Innova Business Incubator (Chile), supported the creation of the Serda Business Incubator in Sarajevo (Bosnia), supported the organisation of the European Day of the Entrepreneur (Eurocities), and transferred the Online Business Plan portal to Buenos Aires, Montevideo, La Plata, Santiago, Bogotá, Rome and Bilbao. Barcelona Activa gives a positive image and is an asset for regional and national authorities in Spain and abroad.

SWOT Analysis

The mission of Barcelona Activa has evolved along with the local needs and global challenges. From an employment and economic agency, Barcelona Activa has become the leading body of the Municipality in terms of innovation, high-growth businesses creation and development of human capital. The programmes and support mechanisms developed by the agency have been successful locally and acknowledged internationally. However, some considerations ought to be taken into account in order to pursue the transformation of the city and preserve Barcelona's competitive advantage over other similar destinations.

The SWOT matrix illustrates the strengths, weaknesses, opportunities and threats of Barcelona Activa identified by the OECD expert team (Annex Figure 3.2). Each of these points will be developed further in this report.

Figure 3.2. Overall SWOT assessment of Barcelona Activa

Strengths	Opportunities
<ul style="list-style-type: none"> Barcelona Activa has proven to be successful in creating an entrepreneurial and innovative environment in the city. Barcelona Activa is well-known locally and credible in relation to the community. Barcelona Activa provides state-of-the-art technology and e-services. 	<ul style="list-style-type: none"> Barcelona Activa benefits of the strong support from the public authorities and good will across the city. Barcelona's tourism development is a window for Barcelona Activa to the international sphere. Quality employment and entrepreneurship tools and services are demanded internationally and there are few providers of such services.



Figure 3.2. **Overall SWOT assessment of Barcelona Activa (cont.)**

Strengths	Opportunities
<ul style="list-style-type: none"> • Barcelona Activa has top-quality infrastructures and well-trained service providers. • Barcelona Activa is a leading local economic development agency also in Latin America. • Barcelona Activa has a great pivotal position between the public vision and the private priorities. • The businesses created by Barcelona Activa's incubator and programmes remain actively involved in the network of enterprises. • The innovation culture among the companies of Barcelona Activa is well developed 	<ul style="list-style-type: none"> • Barcelona Activa is highly collaborative with other public and private organisations and could do more. • Barcelona Activa is well placed to join networks and expand the reach of partnerships with cities abroad to attract human and financial capital. • Barcelona Activa could make use of the international community in Barcelona as a bridge to other innovative cities to explore new collaborations. • Barcelona Activa could actively seek to attract and coach talented entrepreneurs from abroad. • Barcelona Activa could develop specific training programmes to support business creation among the immigrant community.
Weaknesses	Threats
<ul style="list-style-type: none"> • Barcelona Activa has created various but mainly small enterprises. • Barcelona Activa has not been able to raise enough awareness among businesses of the importance of the technology transfer. • Businesses created by Barcelona Activa have disconnection with academic researchers. • The 'Barcelona Activa brand' is not exploited enough internationally. • The communication strategy of Barcelona Activa lacks to reach minority groups. • Barcelona Activa is lacking commercial products, tools and infrastructures to reach out new markets nationally and internationally. 	<ul style="list-style-type: none"> • International competition from emerging cities which toughens the attraction and retention of talents in the city. • Barcelona Activa should give some activities priority, notably supporting entrepreneurship and training in strategic areas for the future of the city. • Barcelona Activa should make sure that the demographic diversity of the city is taken into account in the programmes and tools offered to avoid social disruptions. • The innovative culture among companies outside Barcelona Activa and in universities is low.

Chapter 4

Taking forwards economic promotion in Barcelona: the role of Barcelona Activa

4.1. Introduction to conclusions

This section sets out a summary of previous analysis about the system of economic promotion in Barcelona and the role of Barcelona Activa and sets directions for the evolution of existing arrangements at the current time.

Our assessment can be summarised as follows:

Barcelona has successfully redeveloped its physical attributes and local economy to a point where a fresh approach is required.

Barcelona has acquired a world class reputation in the promotion of local development and urban regeneration can confidently proceed to re-engineer its efforts for the new opportunities and challenges that it faces.

The positive benefits of hosting the 1992 Olympics have now been fully realised in Barcelona and it is time to develop new catalysts and a new narrative about Barcelona's unique and distinctive appeals, and its place in the world.

Growth constraints and citizen uncertainty, which are the results of dynamic development and change so far, combine now to require a fresh 'mandate and agenda' to be developed and articulated for local development in Barcelona. Given the success of past 16 years, it is important to assess and articulate why further development is needed and what form it could take.

A network of capable and talented organisations has emerged in Barcelona to promote local development but there is a lack of clarity over the combined and shared agenda that they are pursuing. There may also be some inefficiencies in having so many different bodies taking disparate initiatives.

4.2. Where is economic promotion in Barcelona today?

Our assessment is based on a concept of waves of local development that is set out in earlier sections. Our observation is that Barcelona has successfully moved through two phases of a four phase process and has already entered the third phase. The characteristics of each phase are described below (Annex Table 4.1).

Our assessment is based on a concept of waves of local development that is set out in earlier sections. Our observation is that Barcelona has successfully moved through two phases of a four phase process and has already entered the third phase. The characteristics of each phase are described in table nine.

Figure 4.1. Phases of the local development process in Barcelona

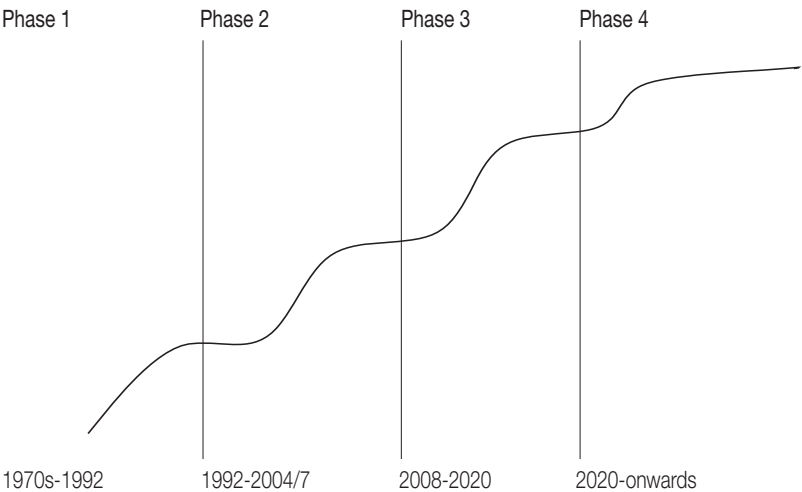


Table 4.1. The characteristics of the local development process

Development Phase	Period	Key ingredients
1	1970s to 1992	<p>Goal was to arrest decline and begin to restore confidence. Required visible signs of change and iconic projects. Key idea is to build some confidence internally and attract external interest.</p> <p>Requires the beginnings of physical redevelopment of the city from the derelict industrial mode to a new mode of urbanism.</p> <p>Physical and Infrastructure led regeneration.</p>



Table 4.1. The characteristics of the local development process (cont.)

Development Phase	Period	Key ingredients
		<p>Requires detailed master/planning and a new urbanism.</p> <p>Requires an urban development agency or similar capability.</p> <p>Focused on larger sites and urban infrastructure.</p> <p>Iconic projects at local scale with international visibility.</p>
2	1992 to 2004/2007	<p>Goal was to become a significant European city.</p> <p>Increasing economic diversification through FDI, entrepreneurship, building competitiveness and building a new supply of jobs.</p> <p>Attracting internal talent and reversing population decline.</p> <p>The beginning of sectoral and knowledge economy strategies.</p> <p>Required a balanced focus between urban development and economic development with a special need to complement physical development with entrepreneurship, incubation and attraction of foreign investment.</p> <p>Continuity of large sites but also market-led development of smaller sites.</p> <p>Need for additional and modernised infrastructures emerges. Connectivity becomes very important.</p> <p>Success begins to trigger wider metropolitan growth and gives rise to initial metropolitan coordination needs.</p> <p>Private sector becomes more important partner/actor in development and begins to share some elements of leadership with City Government.</p>
3	2005/2008 to 2020	<p>Goal is to become a globally important city with leading continental and sub-continental roles (Mediterranean Capital, Gateway to Latin America etc.) and to sustain growth through high quality urban environment and connectivity/infrastructure.</p> <p>Growth management challenges emerge. Need for continuous flow of new sites and development opportunities. Need to contain/control negative externalities e.g. congestion, inflation, conflict over land uses and conflict between diverse populations.</p>



Table 4.1. **The characteristics of the local development process (cont.)**

Development Phase	Period	Key ingredients
		<p>Increased focus on high value added knowledge economy but also on quality of place and creative economy. Greater embedding of local and international businesses.</p> <p>Requires proactive image and identity building to highly segmented markets/audiences</p> <p>Requires economic development agencies which are able to work with complex international businesses, foster business to business collaboration, provide advanced technologies and attract and retain human capital.</p> <p>Private sector co-leadership becomes more critical to attract and retain leading firms in clusters and provide competitive business to business services.</p> <p>Strategic coordination of wider range of players required (e.g. universities, banks, infrastructure providers) and between tiers of government and neighbouring municipalities.</p> <p>Metropolitan growth strategy becomes more critical and coordination is essential to reinforce strategic goals.</p> <p>Connectivity is a major pre-occupation to ensure hub and gateway status.</p>
4	2020 onwards	<p>Is about maintaining 'world class' international success.</p> <p>Requires continuous reinvention and reinvestment and very active problem solving, including ongoing growth management.</p> <p>Major companies and institutions are active and smart and very demanding clients of the city.</p> <p>Requires continuous proactive marketing and customer care with major investors.</p> <p>Metropolitan governance must be very effective. Vertical and horizontal coordination is the norm and organisations are highly flexible and adaptive.</p> <p>Presence of world class development organisation/s, which are jointly owned and governed by major stakeholders as partners.</p>

Barcelona has moved through phase one and is in phase two. Although phase two is not yet fully complete, phase three has already begun. This shift suggests the need to:

- Have some explicit strategy and coordination for economic development. Otherwise there is danger of messy and overlapping activity or disaggregated efforts that amount to little.
- Make the case to citizens for economic promotion actively. Provide a map and compass to the future.
- Have specialist development agencies that can focus on firms and commercial investors.
- Shift to greater use of public/private finance with more ‘joint venture’ instruments between public and market based finance.
- Make some levels of metropolitan coordination and growth management work.
- Actively brand the city and market the city effectively in diversified and sophisticated markets.
- Solve productivity challenges and growth management problems effectively.

This shift from phase two to phase three also marks the end of the business cycle impacts of the 1992 Olympics and the beginning of a new cycle that has to be organised and narrated well. The shift between the stylised second and third phases of growth increases international competition and raises the standards of economic performance which the city must achieve.

This shift is also happening as credit crunch, wider challenges in the financial services sector and a general downturn in the economic have appeared. Consequently, short and medium term approaches are both required.

In taking forwards a refreshed approach for economic promotion in Barcelona a critical issue will be the organisational forms required of the leading organisations that seek to convene, coordinate and implement the agenda. Barcelona already has successful development organisations and it will need them to evolve further in the transition from phase two to phase three.

Development companies and their tools are seen to add real value to the implementation of economic development strategies because they are able to:

- i) **Aggregate** otherwise disparate economic development efforts within one body that can generate real expertise and track record of delivery.

- ii) **Increase the pace** of the city's response to investors/developers.
- iii) **Enlarge the scale** of the implementation that is possible, often by enabling delivery on multiple programmes and projects simultaneously, by commissioning additional resources quickly.
- iv) Enhance the **reputation and credibility** of city 'negotiators,' giving an external investor confidence in the process of decision taking.
- v) Find appropriate means to **share costs and risks** between those promoting developments and investments.
- vi) Develop mechanisms for **value and benefit capture**, enabling some of the fruits of economic development to be recycled within city budgets and programmes.
- vii) **Unlock otherwise under-used assets**, for example in real estate or infrastructure.
- viii) Devise wholly **new sources and instruments for investment**, perhaps in partnership with private financiers.
- ix) **Improve the investment-readiness** of key city projects, developing the propositions to make them more attractive to external investment.
- x) **Increase efficiency** in the utilisation of land, property and local investment markets.
- xi) **Overcome 'coordination failures'** arising from fragmented jurisdictions.
- xii) **Promote and market** the city or sub-region better, overcoming information gaps and asymmetries and building a clearer image and identity.

Barcelona Activa fulfils many of these roles but other actors are also involved. Shaping the future may require a different approach and a different allocation of resources. The main findings of the LEED Programme to date reinforce this perspective and affirm that that local development organisations are potentially important contributors to the implementation of refreshed local economic promotion strategies because they can:

- Be instrumental in creating a **business-like and business-facing** operational environment in which local government led economic development and regeneration be effectively delivered.
- As employers, **attract staff and expertise** into local government led economic development and regeneration, from a wide range of sectors and backgrounds who might not be attracted to work within a wholly municipal structure.

- Operate effectively **in tandem with strategic regional bodies** such as RDAs and do not need to compete for role or resources with regional bodies. In general, the local bodies can focus on implementing the specific goals of regional strategies in their local or sub-regional area.
- Be an effective means to **facilitate multi-area collaboration and coordination** on economic development and regeneration between neighbouring municipalities.
- Be an effective means for local governments to place economic development activity on a more a **formal or statutory footing**.
- Be successful in attracting **private sector partnership and leadership** into local economic development.
- Help to identify local **economic investment priorities** and to assess the best means to finance them including managing costs and risk mechanisms with the private sector, involving for example, **incremental tax levies or supplementary business rates**.

4.3. Recommendations

From this analysis we can make two sets of comments and recommendations about how the economic promotion system in Barcelona should emerge and what the role of Barcelona Activa should be.

The Economic Promotion System in Barcelona

Our analysis suggests the need to:

- Make the case for continued economic growth fully.
- Continue to pursue economic and population diversification whilst retaining Barcelona's distinctive appeal and character.
- Actively promote the advanced urban creative economy alongside the scientific knowledge economy.
- Ensure greater coordination and systematisation of economic promotion.
- Continue to enhance the business friendly and talent friendly attributes of Barcelona, especially in the provision of high quality economically sensitive public services.
- Continue to improve connectivity within the city, metropolitan area and to growing markets for Barcelona's products and locational offer.
- Develop metropolitan coordination of growth management.

- viii) Improve the commercial management of business and productive districts within the city.
- ix) Build regional alliances between Barcelona and the Catalonia region.
- x) Pursue an integrated brand strategy and marketing programme for Barcelona across a wide variety of internationally contested markets.

In order to take forwards this agenda effectively, Barcelona needs to have a small number of highly effective organisations that can lead the city's efforts to engage in economic development alongside the drive for high quality public services and a robust infrastructure platform. In our view Barcelona Activa is a highly effective local development agency that should develop both its services for economic actors, and its role as a coordinator of certain specific inter-agency economic development activities.

Detailed recommendations are included below.

i. Make the case for continued economic growth fully

A key factor in the Barcelona economic success story has been the social consensus model built on a historical tradition of entrepreneurship and the efforts of the Olympic generation. A primary issue today is the need to develop a new consensus on the goals and strategies for future local development in Barcelona and to achieve some tacit level of citizen consent for it. This is not easy because the concepts employed in local development can be viewed as quite complex and the context is global, which can seem very remote.

It is important to stress that economic promotion is not an end in itself. It is a means to achieve other goals:

- Jobs and incomes for citizens; Tax and fiscal resources for social and environmental services.
- Attraction of private investment into infrastructure and amenity.
- Strengthening of the city towards the future. Making it more ready for future changes and adaptable.
- The effective management of the impacts of growth, the tensions that growth and diversification can bring, and the reduction of deeper growth management problems later in the cycle.

Economic promotion is required both to encourage growth, but also to manage and shape it well in the interest of citizens. It is about local economic management and about leveraging more benefits for citizens from the business

and investor base and from the international players in the city. These may require new tools and approaches.

Barcelona Activa has played a key role in the network of economic partners, which includes the Barcelona City Council, other city agencies, the Barcelona Chamber of Commerce, the 12 public-private collaborative platforms, the eight Barcelona Universities and the Regional Government, amongst others. This model in itself contains a number of challenges that need to be addressed. According to some interviewees, decisions sometimes take too much time and are not always explicit. There is reportedly a danger of overlap, duplication and inefficiencies, an insufficient critical mass for many projects, as well as a lack of evidence-based indicators to measure progress. Clearer roles and responsibilities for the various economic stakeholders and more explicit economic policy and strategy, can possibly take the existing social consensus model to a new level of effectiveness.

As Barcelona focuses increasingly on moving from local to global competitiveness, greater consideration needs to be given to the composition, roles and responsibilities of ‘Global Team Barcelona’ and the role of Barcelona Activa within this team.

Telling the Story

Central to the new model of economic promotion will be the need to communicate why the city is promoting development. Citizens want to understand this and to see it as relevant to them. Economic stakeholders and actors also want to know that their needs and interest are taken seriously by the City Government. There will sometimes be tensions between them but the basic task is to articulate the shared interest of the citizens and the economic actors.

ii. Continue to pursue economic and population diversification whilst retaining Barcelona’s distinctive appeal and character

It is important that the City Government continues to work with its partners to refine and communicate Barcelona’s distinctive appeal and values. There is a specific recommendation in better detail below. One reason for this is that Barcelona must continue to diversify its economy and population if it is to succeed as an international, multi-lingual city that can be a global hub and gateway for high value activities. However, it is not yet clear how much of a threat this socio-economic transformation will be to the city’s existing competitiveness and quality of life brand. One specific concern will be the loss of local identity that might occur from increased participation in a global system and exposure to global forces. In fact, increased participation in global activity will be best reinforced by confidently asserting Barcelona’s unique person-

ality and identity, but also allowing that personality to express itself to highly diversified markets and people.

In this context it is important to attend to economic promotion activities that help to stress:

- Barcelona's international flavour as an important city for international trade, investment and entrepreneurship.
- Barcelona's 'openness' to international talent and its diverse multi-lingual population that can serve global companies and global markets from one location.
- Barcelona's intention to continue to attract and sustain global firms, entrepreneurs and innovators.

In this context, it would not be wise to appear to be selecting one or two sectors to work with. For example, tourism and conventions remain important strategic sectors in Barcelona because they have the power to create and reinforce a strong and appealing Barcelona brand. They also give a large number of people easy access to a 'Barcelona experience,' which begins a relationship that can then develop.

Barcelona Activa should also look to balance economic promotion with wider socio-environmental concerns. In other words, pursuing a development phase based on high-skilled, knowledge intensive industries will create winners as well as losers. For instance, consideration should be given to the support of lower-skilled workers to avoid social polarisation and tensions.

iii. Actively promote the advanced urban creative economy alongside the scientific knowledge economy

Much has been made of the importance of the bioscience and biotechnology sectors in Barcelona's future. This is addressed in greater detail in chapter four of this report. The chapter highlighted the need:

- For an organisation like Barcelona Activa to encourage enterprising and entrepreneurial activity by government and agencies at all stages during the transformation to a mature knowledge-based economy.
- For large scale infrastructure investment to meet present demands to support the growth of technology based firms.

It is important to also stress that Barcelona has a successful and growing creative and digital industries sector that is a source of new firms, new employment, increased investment and raised productivity. This sector also fits very

well with Barcelona's external image as a creative and enjoyable place which is 'design-rich' and inspiring.

These creative and digital sectors share many common requirements with the scientific sectors and there are no tensions in pursuing both, though they may enjoy slightly different locations as they do in Northern California where San Francisco acts as the creative hub for the scientific Bay Area/Region.

Barcelona's design sectors are worthy of being considered world class in their own right and there is no reason not to support them actively. Whereas universities are natural partners for promoting scientific sectors, the creative and digital sectors may well require a different alliance of firms, institutions and media, as well as iconic figures that include film makers, architects, chefs and fashion designers.

iv. Ensure greater coordination and systematisation of economic promotion

Our primary observation is that economic promotion in Barcelona has succeeded very effectively in the past few years without systematic or explicit coordination. This may have had few unintended or negative consequences. However, there are good reasons to believe that the continued lack of systematic coordination might undermine efforts. The shift from phase two to phase three in Barcelona's development increases the coordination requirements because it:

- Envisages a wider range of actors becoming involved in local development efforts. For instance, chapter four suggests that for the successful operation of a 'Smart Regional Innovation System,' attention must be given to how boundaries of interaction between the knowledge, business, finance and built environment systems are managed. Moreover, in recent years, the economic promotion 'market' has been considered profitable. This has implied the proliferation of LED initiatives and institutions which are not necessarily coordinated.
- Requires not only better coordination, but also the substantial public and private procurement budgets of key players to drive the innovation system.
- Assumes a greater metropolitan space in which growth will occur and need to be managed.
- Shifts from a focus on large scale urban development projects to a more diversified programme of diffuse economic, social, infrastructural and environmental changes.

- Requires a more explicit agenda and consensus about local development and the need to communicate Barcelona's identity and strategy more widely and powerfully within the city, in external markets and in policy spheres.
- Demands a more comprehensive menu of inter-related actions that will not result naturally from a wide range of organisations implementing 'unilateral' initiatives. This situation will most likely result in both unhelpful overlaps and gaps that should be avoided.
- Requires a greater commitment to develop strategies based on a public-private partnership approach.

Each of these imperatives is subject to potential coordination failures which might have significant consequences.

In our view, it is important therefore to take explicit steps to coordinate the actors in economic promotion in Barcelona more actively and to recruit a wider group of supporters and participants.

Does Barcelona need a defined economic strategy?

This question arises because although there are many strategic documents in Barcelona addressing one or more aspects of economic promotion, there does not appear to be a 'coordinating document' that pulls these together. Indeed, chapter four identifies the fact that work remains in this area.

The key role of an economic strategy in this context is to help organise all available resources towards agreed goals, reducing waste and disparate or conflicting purposes, and to achieve active coordination and communication of economic promotion efforts. It is a helpful means to articulated key choices that have been addressed so that the logic of the strategy is clear, but it is also a means to communicate the depth of conviction and intention that city leaders share for Barcelona's long term success.

A good economic strategy will result in greater clarity, greater confidence and a more durable consensus.

Strategy does not need to be long documents, but it does need to be compelling and command support. It must coordinate inputs from different parts of public and private sectors.

Sometimes strategy is also useful to set out why Economic Promotion is needed and can explicitly address the option to take no action on economic promotion.

In our view Barcelona should develop an economic strategy to articulate its current successes and its path into the future.

v. Continue to enhance the business friendly and talent friendly attributes of Barcelona, especially in the provision of high quality economically sensitive public services

It is important in phase three of Barcelona's progress that existing businesses and talents are genuinely supported by the city and it earns a reputation as a business and talent friendly city. This is particularly important given the potential for further insertion into the global economy to pressurise residential and office prices and cause increased pollution and traffic congestion for instance.

Many entrepreneurs, investors and well qualified individuals are 'trying Barcelona out' with the intention of forming long term judgments in the near future. Indeed, the recent turn in the business cycle is likely to bring these decisions forwards. Barcelona must therefore concentrate too on retaining and expanding businesses that have come to Barcelona and giving talented people who have come continuing reasons to stay.

As chapter four details, some of this may require Barcelona to actively solve the locational problems that business and entrepreneurs/innovators individually face, but much of what is required is active programme to continue to make Barcelona a 'business-friendly' city and a 'talent friendly' city. Such programmes are not difficult to define and implement. They require systematic communication with business and talented workers (usually through surveys) and explicit reforms and changes that are recognised and acknowledged publicly as progress.

vi. Continue to improve connectivity within the city, metropolitan area and to growing markets for Barcelona's products and locational offer

As growth has begun to spread out from the successful re-positioning of Barcelona, the issues of metropolitan and regional connectivity become more important than before. At the same time, growth and development in the Spanish economy and other Spanish cities in particular, raise the importance of a well networked web of economies in Spain. The wider Mediterranean basin is a fast growing zone of European and North African economies in which Barcelona can play a leading role as a gateway and hub centre. In addition, Barcelona's emerging strengths in globally networked industries such as advanced services, high value business tourism, biosciences and creative and digital industries requires continued success in global connectivity and accessibility of Barcelona to other major centres.

The result of these combined developments is that connectivity and accessibility will be critical to Barcelona's success in long term economic development. Barcelona is already a well-connected city, but a substantial portion of its connectedness is linked to lower value tourism or well established routes with established markets. In the next phase of its development, Barcelona will need both to consolidate and deepen existing connections (*e.g.* with European and North and South American centres) and it will also need to develop enhanced connectivity with emerging markets and growing economies. Therefore enhancing connectivity with the BRICS countries (Brazil, Russia India, China and South Africa) should be prioritised along with enhanced connectivity with Eastern Europe and the wider Mediterranean Basin.

A systematic approach to the development of new air routes and the enlargement of the Barcelona Airport, the growth and influence of the Port of Barcelona, enhanced connectivity by road and rail to other Spanish and north Mediterranean cities and improved regional and metropolitan transport all require continuous attention and will need to be the key focus for a robust alliance of local public and commercial interests. The City of Barcelona and the Chamber of Commerce are already actively pursuing such an agenda. This takes place through initiatives such as building international 'business and innovation bridges,' which are joint international visits which aim to analyse the opportunities, economic trends and competitive factors of the various global regions to build the capacity of the innovative companies from Barcelona to compete globally. These efforts should be increased and sustained.

vii. Develop metropolitan coordination of growth management

Metropolitan approaches to manage growth well and to avoid the problems of inflation, congestion and environmental degradation will be a key feature of the next phase of economic development in Barcelona. Success brings growth that must be accommodated. The metropolitan area is the basin for growth management as there will be an increasing spatial division of labour with certain kinds of activities clustering in different parts of the metropolitan area. At the same time, continued population growth is already developing a metropolitan character. Experience from elsewhere shows that efficient property markets and wise asset management and asset release strategies will be necessary if growth is to be accommodated in ways which optimise environmental and social outcomes and that leverage optimal private sector co-investment.

One danger is that different parts of the metropolitan area (different municipalities) start to pursue different growth agendas with elements of competition or lowering of standards emerging which undermine the ability of other

municipal actors to achieve the best outcomes. In devising its strategy Barcelona Activa should therefore distinguish between being ‘in competition’ and being ‘competitive.’

There are existing efforts to build upon and metropolitan coordination has to be pragmatic. Barcelona should start with what is feasible whilst deciding to what extent its mandate extends beyond that of the jurisdiction of the City of Barcelona.

There is also substantial scope for Barcelona based organisations such as Barcelona Activa and 22@ to provide services more widely across the metropolitan area as we shall see below.

viii. Improve the commercial management of business and productive districts within the city

The performance of commercial and productive districts will be an important component of what is required next. This is a complementary but different activity to the management of residential districts and requires a very active partnership with property owners and investors as well as commercial and institutional tenants.

The reasons that business and commercial districts are important are because they provide the primary local productive platform for the firms in the sectors that will be the key focus on Barcelona’s long term success. The quality and consistency of disparate inputs such as:

- Digital infrastructure.
- Power Supply and Energy Efficiency.
- Security and anti crime measures.
- Public realm and amenity (such as street lighting).
- Signage.
- Sanitation and waste management

These are all important aspects of the local economic management that provides an attractive offer to internationally successful firms.

Whilst the basic provision of these inputs is not in question in Barcelona, there will be a need to explicitly coordinate these factors more effectively and to provide business investors and customers with a compelling account management system that benchmarks performance and solves problems actively.

ix. Build regional alliances between Barcelona and the Catalonia region

Barcelona is the economic and cultural magnet of the Catalonia region, as well providing much of its infrastructure and logistics platform. Catalonia cannot succeed without Barcelona's success. However, there appears to be scope for increasing the synergy between the economic promotion of the region and the city with a single shared agenda and programme of co-investment. Again, many of the core elements are already in place, but there is a need to better strategise and communicate how these two powerful tiers of government are working together on their economic agenda. One potential source of tension is the difference between the Barcelona and Catalanian brands.

There is an overt priority around metropolitan growth management where the regions can play an active role in brokering and supporting metropolitan alliances, but there is also a strong regional interest in the success of the city itself that can be the focus of dedicated bilateral actions.

x. Pursue an integrated brand strategy and marketing programme for Barcelona across a wide variety of internationally contested markets

Barcelona has already recognised that much more of the content of city economies is now contested through international competition and that cities must actively compete to win and retain economic investment. This is also an important dimension of the shift from phase two to phase three that is characterised above. Put simply, phase three will involve an increased attempt to attract and retain internationally mobile activity from across a wide range of markets. This means that the international promotion activity of Barcelona will need to be both more diverse and better coordinated.

Client handling and account management for major investors and strategic initiatives are key, but there is also a wider requirement to actively communicate the city's unique offer and distinctive appeal in a coherent manner across markets.

These markets are inter-connected, so a branding and communication strategy must work across several markets:

- Citizens.
- Commuters.
- Visitors/Tourists/International students.
- Foreign Talent (including innovators, entrepreneurs, etc.).
- Existing business base.

- Foreign corporate investors.
- Institutional investors.
- Civic institutions.
- Infrastructure providers.
- Neighbouring jurisdictions.
- Higher tiers of government.
- Media.

A city needs one coherent brand platform and it needs coordinated marketing across different markets with complementary messages for each. This does not mean that the same basic messages or slogans are used in every market, but it does mean that there is coherence in the communication with different markets that is authentic and aggregates to a clear picture of Barcelona's identity, whilst offering precise narratives for different audiences and markets segments.

Barcelona should develop a simple but robust brand strategy to embrace these markets.

Building the role of Barcelona Activa

Barcelona Activa should extend its role and mandate and deepen its existing activities in the following fields:

- i) Enterprise and incubation.
- ii) Employment.
- iii) Innovation.
- iv) Attraction of talent.
- v) Business growth.
- vi) Information and business technology.
- vii) Education.
- viii) Design and delivery of municipal public policies.
- ix) Image, identity and marketing.
- x) Metropolitan level economic development services.
- xi) Regional collaboration with the Catalonia region.

- xii) Public/Private finance.
- xiii) Strategic coordination and leadership of economic development alliances.
- xiv) Venture capital.
- xv) Allocation of Barcelona Activa resources.

Many of the priorities listed above are already being developed by the City of Barcelona. Our articulation of this agenda is not a statement that these themes are absent in Barcelona, but rather a confirmation of their importance and a need to develop them systematically and at an optimal scale of intervention.

We describe these priorities in more detail below.

i. Enterprise and incubation

Barcelona Activa has undertaken systematic leadership of the entrepreneurship and incubation agenda in Barcelona and has had many successes. It is a leading provider of support to new companies and to entrepreneurs and offers a wide range of support and stimulation.

Barcelona Activa's approach and intellectual capital are considered to be of the highest international class and there is growing activity in syndicating these approaches and materials around the world. Barcelona Activa is well placed to provide capacity building and resources sharing with other local development agencies wishing to adopt world class practices in this regards, including others in the Barcelona Metropolitan Area and the wider Region of Catalonia.

There are four directions that appear to be important for Barcelona Activa in the next stage of development:

- Expand the scope and range of the businesses assisted to increase the skills and information base of a wider number and diversity of firms benefiting from the services.
- Increase Barcelona Activa's role in providing services to firms based outside the city of Barcelona but within the metropolitan area.
- Develop a clear strategy for growth companies in their 2nd or 3rd phase of growth and, together with partners such as the Chamber of Commerce, the business schools and the banks, develop effective business growth strategies for sophisticated firms that Barcelona needs for the long term.

- Continue to innovate in the design and development of new resources and know-how to support entrepreneurship and incubation and actively trade this capability to generate additional income for Barcelona Activa.

ii. Employment

Barcelona Activa has also successfully innovated in the arena of employment promotion with the Porta22 initiative and related actions. These are state-of-the-art services and systems to link people with employment and to help them understand the requirements and orientation of different forms of work. This has proved particularly useful for people re-entering work, seeking to develop their careers by shifting into new fields of higher levels of responsibility or for migrants new to Barcelona labour market and needing an orientation.

There are reasons for believing that demand for these kinds of services will increase in the next phase:

- The business cycle is producing a slowing of investment and many forms of trade that are likely to lead to looser labour market and more people seeing work opportunities.
- Immigration into Barcelona is not likely to be slowed directly in proportion to current economic conditions and employment opportunities and so the labour force will continue to grow from international sources.
- Labour supply growth in the wider metropolitan area will continue as factor so both of the above factors and continued domestic migration.
- Consequently, Barcelona Activa may well need to prepare for a more intensive demand for employment support than has been the case for the past three years and it is important to be able to respond effectively to such a need.
- Given that private sector job opportunities will not likely grow in line with labour supply for the next two to three years it may be necessary to diversify and deliver alternative and intermediate employment programmes for displaced workers.

iii. Innovation

Barcelona Activa's work on entrepreneurship and incubation has put the organisation at the heart of Barcelona's drive for an innovative and creative economy. In the next phase of growth, Barcelona will need to have a clear city wide innovation system with a wider range of existing organisations opera-

tionalising a common agenda. This will require at least one organisation to take a lead in working with the partners to define and articulate the common framework and standards of service and support required and to continuously map and review changing needs and expectations. It is logical that Barcelona Activa should play such a role.

iv. Attraction of talent

Barcelona Activa has begun important work on attracting international talent to Barcelona, many of who have set up businesses or led business growth processes, bringing additional investment from outside and increased job opportunities for local people.

In the next phase of growth, Barcelona will need to continue to attract international talent and the investment that they bring or can attract. Few cities have developed an effective system to do this (Singapore, Dubai, Miami and Toronto are some of the examples that have) and Barcelona has an opportunity to provide an extra ingredient in its attractiveness to talented individuals through an enhanced service from Barcelona Activa. Logically, such a programme should be linked to growth sectors where there is international talent such as creative and digital industries, higher education/research, bioscience, technology and advanced services.

v. Business growth and survival

We have already observed that a key feature of the next phase of economic development will be the need to complement entrepreneurship and incubation with deeper business growth strategies. Again, much is already happening in Barcelona that is good. However our review has highlighted four potentially important issues:

- The economic downturn suggests a need to help companies survive in difficult market conditions than many have yet experienced (given the length of the recent growth cycle). A programme of support for companies adjusting to a slower market may well be useful for the next two to three years.
- The next phase of economic development will see emphasis on a wider range of issues for growth businesses, such as the availability of good premises in a tighter commercial property market.
- This is related to the likely attempts by other jurisdictions to incentivise companies to move out of Barcelona into their localities. Barcelona may well need to articulate and deliver a ‘business retention strategy’ for those

businesses that are strategically important, as employers, as core participants in leading clusters, or as major users of key sites and infrastructure.

- The current range of business growth activities will require enhanced coordination and well orchestrated public and private joint ventures and liaison. For example, banks, accountants, lawyers, real estate agents and others all try to support growth companies. At the same time, the role of the local development agency and Chamber of Commerce is to provide some coordination and knowledge sharing between them.

vi. Information, communication, environmental and business technology

Information, communications and business technology remain a key means to achieve productivity advantages within small businesses and growing firms. Barcelona Activa has already developed programmes to support young firms to take up technology usage more systematically and it appears that these will be essential in assisting firms to grow effectively in the next phase.

Equally, there is a high premium now being placed on the energy and environmental efficiency of firms and Barcelona Activa should consider whether there is scope to develop and deliver an effective intervention here and to help build businesses that can support the growing market for new environmental technologies.

vii. Education

Long term entrepreneurship will need to start in schools and Barcelona Activa has begun work at the level of school teachers and students to promote entrepreneurship and to put it on the curriculum.

There are detailed choices to be made about how this is done, but it is an important strategic intervention that can increase the enterprise rate amongst indigenous people to complement entrepreneurship from externally attracted talent. There are excellent examples in the Netherlands, Denmark, the United Kingdom, the United States of America and Ireland that might be useful to review. In general, this is area for expansion in the next period.

viii. Image, identity and marketing

As has been set out already, Barcelona may well need to move towards a more proactive and coordinated brand/marketing strategy to reinforce the city's image and identity. This will require one organisation to take a lead in coordinating the active development and promotion of the brand strategy, the assessment of feedback and intelligence from the markets and the continued devel-

opment of branding activities. It is understood that the brand and marketing strategy would actually be delivered by a wide range of organisations in different sectors. However, experience suggests that a single coordinating body is required. In most countries, the leading local development agency plays such a role.

We suggest that the question of what role Barcelona Activa can play is now given active consideration.

ix. Metropolitan level economic development services

We have identified the need for better metropolitan coordination of growth management issues. One important aspect of this is the Metropolitan provision of economic development services. Barcelona Activa is uniquely placed to grow by providing some of its activities on a fee for service basis in other municipalities within the Barcelona Metropolitan Area. This is already happening and has scope for expansion.

If such an approach were successful in attracting a number of local municipalities as clients of Barcelona Activa's services, then over time, it might be appropriate to consider inviting such municipalities into a more consultative role in helping to shape future service provision.

At the same time, there is a need to for good information and insights about the economic development services available across the metropolitan area. We suggest that this role be taken on Barcelona Activa on behalf of the City of Barcelona.

x. Regional collaboration with the Catalonia region

Barcelona Activa is also well placed to provide services, both within the city and metropolitan areas of Barcelona and the wider Catalonia region that are supported by the regional government. This is already happening. It is important that this activity grows in order to attract more regional investment into the City of Barcelona and to build Barcelona Activa's practitioner influence at a regional level.

xi. Public/Private Finance

Barcelona Activa is also well placed to help develop new approaches to public/private finance and investment, especially into activities that promote entrepreneurship, business growth, technology diffusion, business premises and other key factors for growth.

xii. Strategic coordination and leadership of economic development alliances

We also set out above the need for a greater strategic coordination and alliance building in economic development in Barcelona. Working with the senior officials and political leaders there is usually a key role for a local development agency in such activities, especially in bringing together non-governmental partners.

There are three specific areas where greater strategic coordination is needed:

- Public and private sector partnership: particular consideration should be given to building a greater level of public-private partnership, particularly with the Barcelona Chamber of Commerce and within the context of the city's 12 public-private collaboration platforms. Barcelona Activa, particularly through Barcelona Innova, could play an important role in coordinating and driving these public-private collaboration platforms.
- 22@Barcelona: the possibility of competing mandates between Barcelona Activa and 22@Barcelona needs to be examined. Barcelona Activa's role in the stimulation and growth of Barcelona's knowledge economy through entrepreneurship, innovation and business growth and the role of 22@Barcelona as an area-based economic development agency, seeking to attract and provide services to knowledge economy companies, needs to be more clearly defined to minimise possible overlap and unproductive inter-agency competition, and to maximise synergies.
- Links with universities: a more active partnership between Barcelona Activa and universities, R&D and technology centres and the science park network needs to emerge. Barcelona Activa needs to define its relationship to universities more explicitly, in order to help build stronger partnerships between the City of Barcelona, the private sector and the universities.

xiii. Venture Capital

Barcelona has an investment gap for second round venture capital for fast growing companies. This means that growing companies may leave the city, or fail to grow. Venture capital is an international industry that attracts talent and investment from all over the world and focuses on markets where good returns can be made.

Barcelona Activa could:

- Take steps to demonstrate that there is potential portfolio of companies in the metropolitan area that could sustain an active venture capital firm with a good flow of attractive propositions that can yield good returns.
- Invite international venture capital companies into partnership with the city and local financial institutions to create a regional investment fund to support these firms.
- Build a partnership with one or more firms based on an open competitive selection process.
- Focus the resources of the city on building the attractiveness and readiness of the company base for external investment.

xiv. Allocation of Barcelona Activa resources

A critical constraint is the current structure of the Barcelona Activa budget. If one divides it into the four new focus areas, as defined by Barcelona Activa, it is clear that the lion's share is still allocated towards quality employment (78%) and that the other three strategies are not well funded (business creation - 5%; business growth - 13%, Barcelona Innova - a paltry 4%).

In order to make the transition towards a greater focus on entrepreneurship, innovation and the knowledge economy, Barcelona Activa will have to find ways of growing and reallocating its budget.

These propositions do not summarise everything that Barcelona Activa should do to support the economic promotion system in Barcelona but they do offer an assessment that shows:

- Existing activities that could be strengthened.
- New activities that could be developed.
- New leadership and coordination roles that can be taken forwards in agreement with others.

Overall, Barcelona Activa is already a very successful local development agency. As the system for economic promotion in Barcelona develops and matures, Barcelona Activa will need to continue to deliver excellent services and also contribute to the strategic leadership and coordination of a wider effort.

4.4. Summary of conclusions

Since its creation in 1986 Barcelona Activa has been at the cutting edge of economic development delivery. Founded on an ethos of innovation and

implementation the Agency exemplifies a sense of what is possible under challenging circumstances. For over two decades it has responded to economic cycles of recession, growth and now again recession. Its experience and achievements during this time will help Barcelona and Catalonia hold its nerve during testing times. Many of the issues raised and recommendations made through this Review will become more pertinent in the short term. Investment, leadership, business support and employment and training will be priority themes for the city as whole. It will be crucial that Barcelona Activa continues to receive strong political support and is allowed to continue to innovate and invest in the future of the city.

Building on an exemplary record of collaboration with other stakeholders and international partners will become increasingly important. Developing a stronger vertical dimension to this collaboration with other tiers of government will also be necessary. National, regional and local economies are inter-dependent and never more so than at this moment in time.

For over twenty years the OECD LEED Programme has drawn on the experience of Barcelona Activa as an exceptional example of innovative economic development. Entrepreneurship, employment creation, social inclusion and international development assistance are particular strengths of the Agency which have influenced policy analysis and development carried out by the LEED Directing Committee. This partnership will continue and international co-operation will endeavour to support Barcelona Activa in the next stage of its development.

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Promoting entrepreneurship, employment and business competitiveness

THE EXPERIENCE OF BARCELONA

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Since its creation in 1986 Barcelona Activa has been at the cutting edge of economic development delivery. Founded on an ethos of innovation and implementation the Agency exemplifies a sense of what is possible under challenging circumstances. For over two decades it has responded to economic cycles of recession, growth and now again recession. Its experience and achievements during this time will help Barcelona and Catalonia hold its nerve during testing times.

This study explores in detail how an Agency can stimulate a substantive policy shift which led to the restructuring of the economy of Barcelona.

The full text of this book is available on line via these links:

www.oecd.org/cfe/leed

www.barcelonactiva.cat